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THE

MEDICAL RECORD

A Weekly Journal of Medicine and Surgery

EDITED BY

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Original Articles.

A CASE OF
CYSTIC TUMOR OF THE JAW IN A NEGRO,
AND SOME NEW OBSERVATIONS ON THE PATHOLOGICAL HISTOLOGY OF THIS DISEASE.

BY AUGUSTUS C. BERNAYS, A.M., M.D. HEIDELBERG; M.R.C.S.E., F.R.M.S. LOND.,

MEMBER OF THE GERMAN SOCIETY OF SURGEONS OF BERLIN; PROFESSOR OF ANATOMY OF THE ST. LOUIS COLLEGE OF PHYSICIANS AND SURGEONS.

THE patient, W. G——, a full-blooded negro, about twenty years of age, was brought to me about October 1, 1884, by Drs. Skeele and Robinson, of Harrisonville, Ill. Fig. No. 1 shows his condition at that time. He was

FIG. 1.

in every way well developed, perfectly healthy, had never been seriously sick. He stated that his jaw had been slowly growing larger and more protruding for about two years. There had never been any severe pain during its growth, and it only troubled him recently on account of its large size, and because it now prevented him from closing his mouth entirely. There was considerable hypersecretion of saliva, which would be thrown from his mouth while speaking, and would continually overrun the corners of his mouth. His speech was but little disturbed by the tumor, the tongue being as yet quite free and movable. The teeth in the lower jaw were not in their proper positions. Some had been previously lost; in fact, only the two last molars were present on the right side, and only the præmolar on the left. The four incisors and the two canines were still present, but not in line. The teeth were all normal, except the second molar on the right side, which showed a deep cavity in its posterior median root. The teeth were all quite loose in their sockets. The eruption of the teeth, so far as known to the patient, had been normal. He had suffered considerably from toothache, and had lost the missing teeth by extraction, on account of the pain they gave him. He states that the growth of the tumor began soon after the extraction of the first right molar tooth, and believes that all his trouble came from this tooth. We shall see later on that very probably the growth of the tumor began previous to his toothache, and perhaps even caused his dental trouble.

The tumor was found to be nearly five inches in its largest diameter from right to left, a little below the line of the mouth. Its thickness from the chin to the alveolar process was about two and three-fourths inches. The tumor extended almost to the coronoid process, involving the entire body and a portion of the ascending ramus on both sides. It was almost regular in its form, showing only slight lumpy enlargements on its surface. The tumor was quite hard in some places, while in others the cystic growth had distended the jawbone so much that a crackling, as if of parchment, was conveyed to the examining finger. Some of these thinnest places were clearly fluctuating and almost translucent. The skin of the chin was very smooth, and the skin of the cheeks and neck was drawn out, as was also the lower lip, in order to cover the tumor. Little or no growth of beard was noticeable on the distended skin. There was no communication of any of the cysts with the cavity of the mouth; percussion over the tumor was dull (see Figs. 4 and 5).

Before describing the operation and its results, I will give a short *résumé* of what is known up to the present day about the cystic degenerations of the lower jaw, and finally describe the pathological histology of my case, comparing it with the observations of my fellow-workers in this field of research. A complete list of the literature used by me in this study will be found attached.

In the entire literature of this subject I have found the histories of 122 cases of tumors of the jaw, some of which are very accurately described, and others are only reported very briefly. In an attempt to tabulate them I found it thankless work, since many of the points which command our consideration were overlooked or imperfectly stated. Thus, for instance, the minute structure is not known of over 90 cases. In fact, I can only find reports of 24 cases that have been properly examined by the microscope. Instead of detailing these 122 cases singly I may be permitted here to give their description in a general way. Magitat has compiled 100 cases, and I must refer any one especially interested to his work (op. cit.).

These tumors have been variously called multilocular cystic tumor, adeno-sarcoma, cysto-sarcoma, jaw cysts, cysto-maproliferum maxillæ, follicular cystoma, cysto-fibroid, cysto-dermoid, and lastly, Mr. Eve has proposed for them the name of multilocular cystic epithelial tumor (*cystoma multiloculare epitheliale*). It will be seen that these names may cover a multitude of pathological formations of the jaw. The fact of there being so many different names points out that some real difference probably exists between these cystic tumors. The only correct course to follow in naming pathological formations seems to me to be based on an accurate investigation of their development or evolution. I will therefore defer the christening of my tumor until after we shall have considered its histo-pathogenesis.

The disease is rarer in the upper jaw than in the lower,

the ratio being in my table as 1 to 11. The tumors vary in size from a pigeon's-egg to the size of a large head. They grow within the bone, expanding the compact outer layer, so that it forms a bony capsule of varying thickness around them. Fig. 5 will give a good idea of a section. There is a conglomeration of cavities of various sizes appearing like an irregular honeycomb. The cysts are separated by septa of dense fibrous tissue, or, as in my case, by completely ossified spicula and membranous lamellæ.

The contents of the cysts are fluids or semifluid, the chemical constitution of which has been found to be an albuminous fluid of different colors. A viscid mucus seems to be the most common occurrence. The color depends upon the accidental admixture of decomposed blood, and may be from a clear transparent to a turbid brownish or even reddish hue. Sometimes one of these cysts contains brown mucus, while another in the same tumor may be filled with a transparent clear liquid. The density or viscidity may also vary in cysts of the same tumor. We are accustomed to this peculiarity in multilocular ovarian tumors. I have often drawn six or seven different kinds of fluid from the larger cysts of one ovarian tumor. It is claimed that cholesterin crystals have been found in tumors of the jaw. I have never seen them. Some of these cysts contain air. Bryk's case gave a tympanitic sound on percussion. The cysts in this case were in open communication with the mouth. In some cases (Falkson and Magitat) the cysts intercommunicated. In my case the largest cysts were entirely distinct, and it was impossible to determine a communication between any two. In cases where this intercommunication or a communication with the mouth exists it is undoubtedly a secondary arrangement which has been brought about by purely mechanical agencies accompanying the growth of the cysts and the pressure of their contents, which may eventually cause erosion

Fig. 2.

and rupture. The size of the cysts varies from a cavity not visible to the naked eye to the size of a hen's egg. The walls of the cysts are, as a rule, smooth and lined by a dense fibrous layer of tissue. Bryk speaks of warty excrescences and scar-like figures in his case.

These tumors have frequently been known to follow some kind of inflammation or injury or irritation of decayed teeth. It is very certain that the growth of these tumors causes local inflammation about the gums, and finally even causes the teeth to become so loose that they fall out, or are torn out by the act of chewing. I cannot well imagine how a decayed tooth can cause a perverted action of the enamel organ which we shall directly find to be the cause of these tumors. Suffice it, we know nothing positive about the exciting causes of this rare disease. The most plausible hypothesis is, perhaps, the one which refers the origin of these cystic degenerations to a heterotopic, embryonic germ, a remnant

Fig. 3.

of the enamel organ, and confesses total ignorance in regard to exciting causes.

The disease is most common during youth, or about the time of puberty. My table would place the largest number of cases at about the twentieth year. Cases have been known to occur as late as the seventy-fifth year (Coote).

Wilks describes a congenital case. This is not surprising to me, as I have both seen a child born with twelve teeth, and known a gentleman who developed a new tooth at the age of sixty-seven.

The history of my case, given above, sufficiently indicates the clinical aspects of these tumors. They become very troublesome to their victims by their large size. Some cases have, however, been known where they were borne as long as twenty-five, and even twenty-nine years. By interfering with the functions of the organs in the mouth, they become dangerous as well as disagreeable, and are among the least beautifying of known tumors, since they cannot easily be hidden or made less hideous by cosmetic aids. They usually cause no swelling of the adjacent lymphatic glands and, in fact, are very slow to infect neighboring organs. Formerly the general impression prevailed that all multilocular cystic tumors were benign. Like most other tumors, advanced age, constitutional weakness, or infirmity no doubt increase the tendency to malignancy; during the early adult stage it is very small. Mr. Syme saw recurrence twice after partial removal. Mr. Eve quotes a case of Jonathan Hutchison's where the autopsy clearly showed secondary deposits in the lymphatic glands, and Mr. Heath saw a recurrence and removed it twelve years after he had completely removed the affected portion of the jaw. Both the latter specimens are in the Museum of the Royal College of Surgeons, Lincoln's Inn Fields, London. We have the authority of Mr. Eve for the state-

ment that the microscopical characters in both the tumors were those of multilocular cystic degeneration.

So far as known to me, the case which gave me cause for this study is the only one that has been observed in a negro. This race is noted for its fine teeth, so long as it remains pure. Dentists claim, however, that mulattoes are very much afflicted by decaying teeth. These circumstances may become of more value in the future when the etiology of tumors of the jaw can be judged on the basis of a more extensive material.

In October, 1884, the young negro was received at the Surgical and Ophthalmic Hospital, and in the presence of the graduating class of the College of Physicians and Surgeons, assisted by Drs. Louis Bauer, H. Wiehmann, Charles Bark, H. Harnisch, E. M. Powers, George J. Bernays, H. Summa, and others, I proceeded to remove the entire tumor. The patient was chloroformed while sitting upright in an operating-chair. The first incision was made in the median line, severing the lips and all the soft parts down to the hyoid bone. I now dissected back all the soft parts along the jaw up to the angle on both sides, and also freed the tumor, in its whole extent, on its lower surface. The most tedious part of the operation, namely, the sawing through of the healthy jawbone above the angles, was now performed. The bone was found to be of unusual hardness, and although two of the best Langenbeck's straight saws, which had been refiled and set, were used, this step of the operation consumed twenty minutes. I now secured the tongue by means of a loop of thread and forceps and quickly trimmed it away from the upper surface of the tumor. The hemorrhage during the operation was considerable. The mental, the submental, the inferior dentals, and the fascial artery of the left side were cut. The inferior dental arteries could not be tied, because they immediately retracted into their bony canals. I found it expedient to push a piece of a match, which was sharpened, into the canal of the right side, the place of section not being more than one-fourth of an inch from the lingula. The artery in the left ramus stopped bleeding after the finger had been pressed over the foramen a few seconds. The wound in the mouth was now closed by transversely stitching the

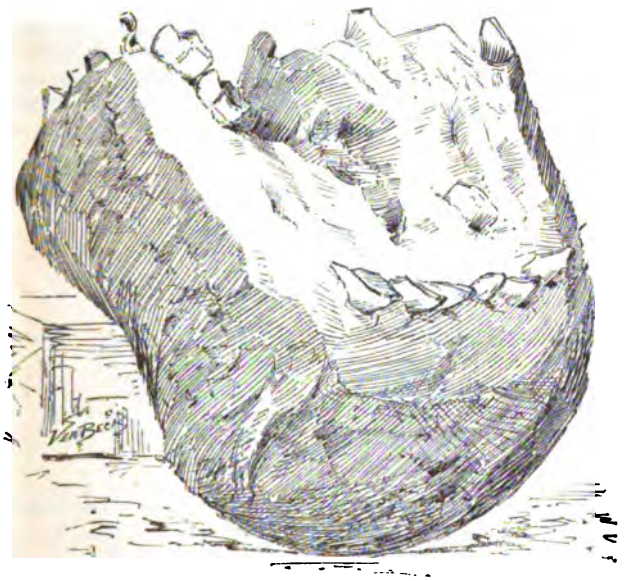

FIG. 4.

remnants of mucous membrane together under the tongue as well as was possible with twelve sutures. I was tempted to remove a portion of the bagging loose skin, but concluded merely to unite the cut edges and depend on contraction to reduce the immense pouch. As may be seen by Figs. 2 and 3, this expectation was fully realized. The union of the lip took place by first intention; the sutures of the mucous membrane had to be partially removed on the second day on account of a very severe secondary hemorrhage which came from the left inferior dental artery. It became necessary to cauterize the cut surface of the jaw with concentrated perchloride of iron in order to stop the hemorrhage. After this the healing process went on regularly; the patient left for his home in the fourth week. A very hard and unyielding scar now forms the base of the mouth and gives a good support to the tongue. The scar forms a sort of diaphragm extending across from one stump of the jaw to the other.

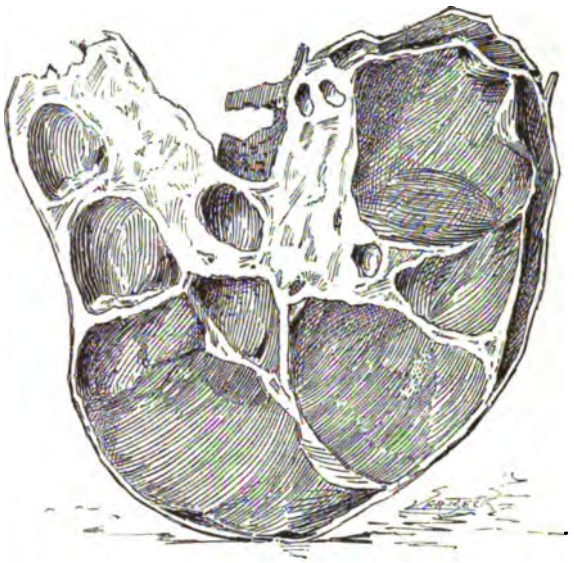

FIG. 5.

By contraction the ends of the rami have been somewhat approximated to one another. Fig. 2 represents the patient after a definite union of all the wounds had taken place.

In order to give the patient a better appearance, and also to prevent further contraction, I consulted Dr. F. W. Hermann, a dentist of this city, who has given considerable attention to prothesis and the special adaptation of artificial teeth in cases of defects of the jaws. He determined to try the very difficult task of making an artificial lower jaw of vulcanized rubber to fill out the defect between the stumps of the rami. The articulation was effected by means of springs attached to the last molars of the upper jaw. Fig. 3 shows the patient as he appears now, nearly six months after the operation, with the artificial plate in position. The cosmetic effect is certainly marvellous. I believe that, with practice and perseverance, the utility may also be much increased. Without the artificial jaw and teeth the patient will be compelled to use his fingers as opponents to the incisors of the upper jaw, in order to properly comminute or masticate solid food. His speech is but little inconvenienced by the loss of his jaw. The patient expresses himself well satisfied with his present condition. The illustrations were all made by the new photo-zincotype process after photographs.

Histo-pathology.—Up to the time of Magitat's investigations all tumors of the jaws were called cystoma, without regard to their microscopical structure, or they were denominated cysto-sarcoma, or cysto-fibroma, according to the opinion of the respective operators in regard to the malignancy or innocence of their cases. If thought to be very malignant, they were called cysto-sarcoma; if benign, cysto-fibroma seemed to fit the case.

Christopher Heath, in his fundamental work on the "Injuries and Diseases of the Jaw," is the first who expresses the opinion that many of these cysts or cystoids of the lower jaw, although apparently in no connection with the teeth, very probably originate somehow through the irritation of diseased or developing teeth.

Magitat, "On the Cysts of the Jaws," defines these tumors as follows: "A cyst of the jaw is a tumor well

bounded and limited on all sides, which has developed within the jaw-bone, and contains a fluid of variable consistency, mingled with solid parts. It always originates from the dental system, and dates back to various stages of development of the tooth-sac." Besides these tumors, which Magitat calls follicular, he distinguishes periosteal cysts. He distinctly says that these cysts do not originate from the enamel epithelium, or enamel organ, as it is usually called.

Falkson's contribution to our "Knowledge of Cysts of the Jaw" is the first investigation which clearly opposes Magitat, and claims the origin of the cysts from the enamel organ. He gives a description and a semi-diagrammatic illustration of the histological details of a tumor which was first macroscopically and surgically described by Caspary.

Professor A. Bryk, of Krakau, describes the minute anatomy of his case, and also gives a semi-accurate illustration of a microscopical section. He entirely corroborates Falkson's claim that the alveolar structure and cysts are an outgrowth of the enamel organ.

Mr. F. S. Eve has accurately examined twelve specimens of cystic tumor, and also corroborates the theory that these degenerations begin from the epithelial cells of the enamel organ, or even goes so far as to claim that they are ingrowths of the epithelium of the gums. Büchtemann also saw an unmistakable connection between the epithelium of the gums and the formation of the tumor.

It would seem, therefore, that the evidence in favor of the theory that these cysts originate from the enamel organ may be summarized as follows: 1, The constant appearance of one layer of narrow columnar epithelium which lines the alveoli; 2, the peculiar network of irregular, star-shaped cells which fill up the alveoli; 3, the absence of blood-vessels in the just-mentioned tissues; 4, the connection of the alveoli, in the form of ingrowths, with the epithelium of the gums.

In order to show more clearly in what respects the alveoli found in the cystic tumors, as just described, correspond to the enamel organ, let me briefly review the development of that structure, as it appears in the embryo. In the second month of embryonic life a dipping down or an ingrowth of the epithelial lining of the gum is noticed along the entire upper margin of the jaws. This is called the enamel germ. This germ now buds out in a number of places, and grows downward into the jaw. Each one of these consists of an outer layer of elongated cylindrical cells, corresponding to the deepest layer of the epithelium of the gum. The centre or interior of the bud consists of more stellate epithelial cells, which have differentiated a peculiar gelatinous intercellular substance. This bud now becomes invaginated, it being pushed forward by the primitive tooth papilla in such a manner that it forms an epithelial cap over the papilla. This cap is called the enamel organ, from which the beautifully regular enamel prisms are formed after the papilla and its cap have become enclosed by the tooth-sac (Kölliker, Waldeyer, Gegenbaur). The very marked similarity between the structure of the tumors and the enamel organ now becomes apparent at a glance. It would appear, then, that the above-quoted authors have established a very strong probability in favor of the hypothesis that these tumors are the result of abnormal growth of the enamel organ. I will now proceed to detail my own observations, and I am glad to be able to advance the above hypothesis to the rank of a positive fact by my observations on the tumor in my possession.

The tumor was of course quite fresh and in the best possible condition for histological examination. For the purpose of cutting and staining fine sections, I was compelled to use decalcinating reagents. By immersion of two small pieces, one from the centre and one from the periphery of the tumor, which had been taken off with a saw, in a two and one-half per cent. solution of muriatic acid, all the calcareous matter was dissolved in twelve hours, and the hardening process was next in order. I used a three-fourths per cent. solution of chromic acid, in which the specimens remained one day. The chromic acid was now reduced, and the hardening finished by placing them in absolute alcohol. The sections were stained in alkaline carmine and picrocarmine; they were then anhydrated and examined in the oil of cloves, which rendered them perfectly transparent.

A section of the fleshy, more porous portion, from near the centre, when viewed with a Hartnack objective No. 4 (equal to about seventy diameters), revealed an alveolar structure, the arrangement being very irregular, at the first glance much resembling an epithelioma. The alveoli were arranged into groups, separated from one another by fibrous layers in which blood-vessels and lamellæ of bone were plainly seen. The alveoli were mostly round, but some of them had processes budding out in various directions. Hartnack No. 7 (magnifying three hundred and fifty diameters) shows the cellular structures, and here, at the first glance, we see that the alveoli, besides being lined with a regular columnar epithelium, are surrounded by a layer of homogeneous pearly substances, which sometimes show slight lines like radii, as if they were projections from between the cylindrical epithelium. This layer was always present, and can be seen in Figs. 6 and 7, surrounding the alveolus, exactly corresponding to its shape, and of about the same thickness as the lining epithelium. This layer is evidently the product of the enamel epithelium, and is certainly enamel substance. The layer of genuine enamel has never been mentioned or recognized by any observer before; it furnishes the keystone in the arch of evidence, establishing the fact that these cysts are the result of pathological development of the enamel organ.

The contents of the alveolus are made up of a peculiar tissue composed of stellate and round cells, with a peculiar gelatinous intercellular substance, which is perhaps the product of degeneration of the cells. It must not be forgotten that these elements within the alveolus are also of epithelial origin. No other kind of tissue could possibly be found in this place, since by their origin the alveoli are as much products of the epidermis as are any of the other organs of the skin, for example the hair or the tallow glands. The whole alveolus, or group of alveoli, are surrounded by a fibrillary connective tissue, with few spindle-shaped cells.

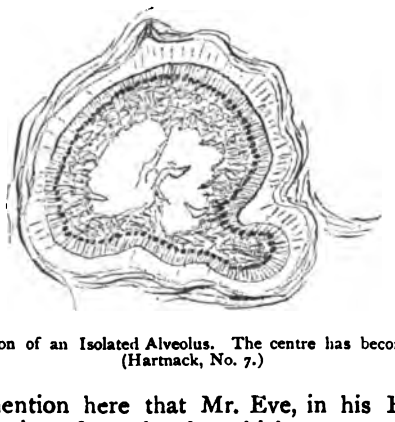

FIG. 6.—Section of an Isolated Alveolus. The centre has become liquefied. (Hartnack, No. 7.)

I may mention here that Mr. Eve, in his Fig. 3, has given a drawing of an alveolus which seems to me to be very similar to my own, and I am inclined to think that his drawing represents either the enamel epithelium with the surrounding enamel, or perhaps osteoblasts with a layer of bone. I cannot agree with his opinion about this most interesting case. It is specimen No. 2234, Royal College of Surgeons' Museum, and accompanied Mr. Christopher Heath's Jacksonian Prize Essay. Mr. Eve further says: "The growth, like all tumor formations, makes no attempt at the higher development of the normal structure," referring to multilocular cystic

disease in general. The tumor of the young negro does seem to make an attempt at a higher development, but certainly never reaches the perfection we find in a developed tooth.

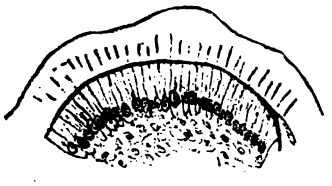

FIG. 7.—Section of the Periphery of an Alveolus, showing the Cylindrical Epithelium, with its Product, the Enamel Prisms. Some indifferent epithelial cells within. (Hartmack, No. 9.)

Among the retrogressive metamorphoses of these tumors, I consider the formation of larger cysts the principal one. The largest cysts in the tumor examined by me had entirely lost their columnar epithelium. Their walls were formed by a dense fibrillary tissue, which appeared like a periosteum, lining the lamellæ of bone that formed the boundaries between the larger cysts. Only rarely was a very attenuated layer of enamel found between the bone and its periosteum, or endosteum, as it were. The process of gelatinous or colloid degeneration of cells has so often been described that I need only mention its presence in my specimen to account for the presence of such liquids in the cysts. I agree with Mr. Eve in the opinion that this peculiar metamorphosis depends probably upon the inherent tendencies of that portion of the gum from which the enamel germs originate. But I believe that these tumors, as a rule, will be found to originate from remnants of embryonic enamel germs, and only rarely, if ever, from epithelial ingrowths occurring later in life.

Falkson draws and mentions the so-called Perl-kugeln that we so often meet with in epitheliomata of the skin and mucous membranes as occurring in the alveoli of these cysts. I can corroborate this fact but cannot compare these formations to the Perl-kugeln of malignant tumors. These cornified plugs of epithelial cells are to be classed among the normal processes always found accompanying the atrophy of the remnants of the enamel organ. Kölliker ("Entwickelungsgeschichte," page 827), says they are found sometimes in connection with the remnants of the enamel germs, while they are often found quite independent between the tooth-sac and the epithelium.

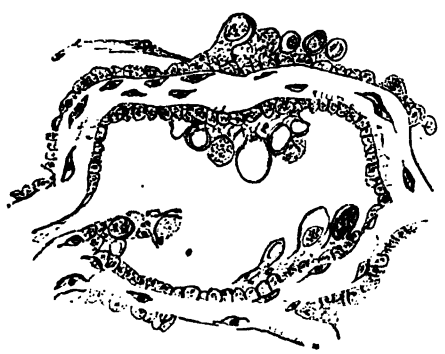

FIG. 8.—Section of Trabeculæ of Developing Bone. Osteoblast cells, gelatinous degeneration of the cells adjoining the osteoblasts.

A section through the periphery of the tumor, near the large cysts, afforded me a very peculiar view. I have illustrated it in Fig. 8. It shows a young portion of cancellated bone-tissue, with the small osteoblast cells of Gegenbaur in the process of development. The interior of the bone is lined with osteoblast cells, but the centre is empty, the fluid which it contained having fallen out of the section. Only some few cells are attached to the osteoblasts, and these are in various stages of decomposition by gelatinous degeneration. This observation would seem to show that perhaps the osteoblast cells play an important part in the development of the cystic tumor. I have long become convinced of the truth of Gegenbaur's proposition, that the formation of true bone is always dependent upon the osteoblast cells. My observations have firmly established that fact in my mind. Seeing now that these cystic tumors are often accompanied by a proliferation of the bone, the question arises, whether or not the abnormal growth of the enamel rudiments is the primary cause of the cystic tumors? It seems plausible that the growth of the bony shell is merely a passive dilatation, but I have propounded the question in this place because it appears to me of importance for a full understanding of these tumors. Since in many cases the bony septa are wanting, and we find only connective tissue separating the cysts from one another, we may safely assume that the formation of these epithelial multilocular cysts of the jaw is dependent upon the abnormal and heterotopic proliferation of the enamel germ or remnants of the enamel organ. Based upon this understanding of these tumors, I may now be permitted to propose the simple but expressive term Enamelogenous Cyst, in the place of the numerous names heretofore used to designate these unique tumors.

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THE LAW OF BURIAL.[1]

BY HENRY A. RILEY, ESQ.,

NEW YORK.

THE treatment of the dead and the selection and adornment of the places where the departed are laid to rest are matters of much more interest and concern than many seemingly more important things affecting the living. It is not a matter of surprise, therefore, that the laws of all nations from the very earliest times should have laid especial penalties upon any disrespect shown either the dead body or the tomb.

The history of burial rites, ceremonies, and laws is a most interesting one, and perhaps the best essay on the whole subject is found in the dry pages of a New York law book,[2] where the Hon. Samuel B. Ruggles treats in a most learned way of past laws and present duties in connection with the dead. The two modes of disposal of the dead in general use have been inhumation and burning, and Sir Thomas Browne, in his quaint treatise on urn burial, thus writes concerning them: "Men have been fantastical in the singular contrivances of their corporal dissolution, but the soberest nations have rested on two ways—inhumation and burning. That interment is of the elder date the examples of Abraham and the Patriarchs are sufficient to illustrate; but Christians have abhorred the way of obsequies by fire,

[1] Read before the New York Society of Medical Jurisprudence and State Medicine, March 12, 1885.
[2] 4 Bradford Rep., 502.

and though they stickled not to give their bodies to be burned in their lives, detested that mode after death, affecting rather a depositure than an absumption, and conforming themselves to the will of God, which required them to return again not to ashes, but unto dust. But burning was not fully disused till Christianity was finally established, which gave the final extinction to these sepulchral bonfires."

Sir Thomas Browne certainly stated the custom and the law correctly as regards Christian nations for the time when he wrote, but the chronicler of the present day will be obliged to record a partial return, at least, to the mode of cremation. In England itself, where conservatism is a matter of religious belief in a matter like this, the pendulum of practice has begun to swing to the other extreme, so that one of the principal judges of the realm has in a very elaborate opinion decided that cremation is not illegal; and societies to furnish facilities for cremation are springing up in various parts of Great Britain.

The Bible has frequent reference to the practice of sepulture as distinguished from burning, and it is recorded of the Patriarch Joseph that "when he died he was put into a coffin and embalmed." In an interesting case before the Consistory Court of London, in 1820 (Gilbert *vs.* Buzzard, 2 Hagg. Rep., 334), Sir William Scott says of the place of sepulture: "In ancient times caves seem to have been in high request, then gardens or other private demesnes of proprietors, inclosed spaces out of the walls of towns or by the sides of roads, and finally in Christian countries churches and churchyards, where the deceased could receive the pious and charitable wishes of the faithful who resorted thither on the various calls of public worship. In our own country the practice of burying in churches is said to be anterior to that of burying in what are now called churchyards, but this was reserved for persons of pre-eminent sanctity of life." The use of coffins or some similar receptacle for the dead has been almost universal in cases of sepulture, though the material used for such coffins has varied greatly. They have been made at different times of wood, stone, metals, marble, and even glass.

In 1786 the Grand Duke of Tuscany attempted to forbid the use of coffins, on the ground that the dissolution of bodies would be hastened and the health of the living better secured by depositing the bodies in the ground without any covering. The means adopted to carry this radical measure into effect were calculated to offend every sentiment of religion and humanity. It was ordered that the bodies of all dead persons, of both sexes and of every age and condition in life, whether dying of old age, at the very beginning of life, of loathsome diseases, or by accident, should all be brought out naked from the houses, tumbled into a night-cart at the sound of a bell, and conveyed to a pit without the city walls, there to decay in one undistinguishable mass. It is not surprising to learn that an edict of this kind utterly failed of its object, and was revoked not long after its promulgation.

The English law has been held to secure to a person what is called the right of burial; but there is no absolute right that a person should take with him to his last dwelling-place a coffin or large burial-chest. This was the very point decided in the case of Gilbert *vs.* Buzzard, just mentioned, where the relatives of the deceased insisted on burying him in an iron coffin, which the cemetery authorities refused, on grounds of health, to admit. Upon this issue the Court held that the only inherent right of a British subject, was that of burial of the body. Still, in this case, it was decided to admit the iron coffin, if a proper compensation was made for its supposed indestructibility. As the cemetery was established for the use of future generations as well as the living, it was not held right to admit iron coffins in such manner as to speedily fill it up without large compensation for the privilege.

Without discussing further the interesting question of the history of burial, the present law relating to the dead may be considered under three heads:

I. After death, and before burial.
II. At burial.
III. After burial.

The disposal of the bodies of the dead by cremation, or fire-burial, as it is generally termed in England, as has been stated, is becoming so common, by the rapid erection of furnaces where the dead really turn to ashes, that there may be in the future some slight changes in the application of existing laws.

The legal principles involved can hardly be varied, however, for they are inherent in the change from life to death and do not affect the methods used.

The adoption of cremation has been so recent and has had as yet so trifling an influence upon burial customs and laws, that but little attention need be given to any possible effect wrought by this new method.

In this country there has been no instance as yet where the propriety and legality of cremation has been called in question. It is not probable, however, that under the free spirit of our legal regulations, there will ever be a judicial decision interfering with perfect freedom of choice in regard to the mode of disposal of the dead. The paramount interest of the public health may at certain times prescribe some uniform mode for contagious diseases, but aside from this no interference is at all likely.

I. In considering the first point, viz., laws in regard to the body after death and before burial, it will be well to discuss first, ownership and custody of the dead, and secondly, the duty of burial

1. Ownership and custody of the dead. There is no such thing as ownership of the dead, in the sense that the term is applied to ordinary articles of barter and sale. The corpse cannot be sold by the surviving relatives for a price, though it would seem that the deceased could himself, by will or other written instrument, give such a right to the body after death that the donee, having once acquired possession of it, could hold it as against the relatives. If, however, the relatives have possession, and desire to bury it in a family plot, it is doubtful if any court of equity would enforce the delivery to a person claiming it under the will. Such an instance would be that of a person selling his body to a physician for purposes of dissection and the relatives refusing to recognize such sale (Am. Law Times, July, 1871). The question is viewed from the standpoint of public policy, health, and decency, and these considerations will be held to override any individual claims to the dead body. In a case reported in 90 Mass. Rep., 281, the rule is stated to be as follows: "A dead body is not the subject of property, and after burial it becomes a part of the ground to which it has been committed, 'Earth to earth, ashes to ashes, dust to dust.'"

Sir William Blackstone, in his Commentaries (2 Bl. Com., 429), says that although an heir has a property in the monuments or escutcheons of his ancestor, yet he has none in his body or ashes.

The same principle is stated in Secor's case (31 Leg. Intel., 268), and Guthrie *vs.* Weaver (1 Mo. App., 136). Sir Edward Coke (3 Inst., 110) writes thus in 1613, when the question was a novel one: "At the assizes in Leicester in Lent, *anno* 10 Jac., the case was thus: One William Hain had in the night digged up the graves of divers severall men and of one woman, and took the winding sheets from the bodies and buried the bodies again, and I advising hereupon for the rareness of the case, consulted with the judges at Sergeant's Inne on Fleet Street, where we all resolved that the property of the sheets was in the executors, administrators, or other owner of them, for the dead body is not capable of any property, and the property of the sheets must be in somebody; and according to this resolution he was indicted of felony in the next assizes, but the jury found it but petit larceny, for which he was whipped, as he well deserved."

A Missouri court (Guthrie *vs.* Weaver, 1 Mo. App., 136) has gone even farther than this, and maintains that there is no ownership even in the coffin and shroud. It says: "When a human body has been interred with the knowledge and consent of those who, up to that moment, may have owned the coffin and shroud, these articles are irrevocably consigned to the earth, and all property in the purchasers of them is at an end. In a later case, however (State *vs.* Doepke, 68 Mo., 208, 1878), this case seems to have been practically set aside as to this point.

There is in the law books but one case which takes the opposite view as to ownership, and in that (Bogert *vs.* City of Indianapolis, 13 Ind., 138) the Court states broadly: "The bodies of the dead belong to the surviving relatives in the order of inheritance as property, and they have the right to dispose of them as such within restrictions analogous to those by which the disposition of other property may be regulated." This decision has been much criticised, and is certainly not the law outside of Indiana.

In the case of dead bodies found on the seashore and cast up from a wreck, there is no ownership allowed to the finder, either in the bodies themselves or the articles upon them. In a Massachusetts case (13 Pick., 402) the removal of articles of dress by the finder was adjudged to be a felony.

It is true, nevertheless, that the courts recognize a sort of *quasi*-ownership on the part of near relatives as against those of more remote kinship, such as to enable them to keep, protect, and bury the body decently, should a claim be made for possession of it. The time usually elapsing between death and burial is so short that the question of *quasi*-ownership is not often brought before the courts until an interment has taken place, and then the question is complicated by this very fact, for public policy demands that a body shall not be disturbed except for the best of reasons. In regard to the rightful custodian of the dead, it is said in Secor's case (31 Legal Intelligencer, 268) by Judge Pratt: "The executor is the person having the lawful possession of the remains," and in Sears *vs.* Gidday, a recent Michigan case (2 Northwestern Rep., N. S., 367) it was held that the husband was liable for the funeral expenses of his deceased wife, although she left all her property to another person, and the latter individual assisted in the arrangements for the funeral. The liability for the expenses would naturally admit of the inference that whatever right of ownership existed was in the husband.

In an article in the *Albany Law Journal* (10 Alb. L. J., 70) on the subject "The Legal Custodian of Deceased Bodies, Who is?" the following deductions are made: 1. That the right to protect and bury a corpse is in the executor. 2. In the absence of any testamentary disposition it devolves upon the widow, husband, or next of kin. 3. The owner of the land has the right of action in trespass to protect a grave or sepulchre from detriment. 4. That a corpse is in no way subject to sacerdotal power or ecclesiastical cognizance. 5. That the right to protect a corpse implies the right to select the place of its sepulture. 6. That during her lifetime the widow of a deceased husband has the direction and control of the place of interment, and so the husband over his wife's remains.

2. In regard to the duty of burial. This obligation follows partly from the idea of *quasi*-ownership existing in the executor, and partly from considerations of public health and decency, which demand that this last sad office shall be speedily performed. In Rex *vs.* Stewart (12 Ad. and Ell., 773) an old case, it was held that the duty of providing for the corpse and carrying it to the grave decently covered is thrown upon the person under whose roof the death takes place; for such person can not keep the body unburied nor do anything which prevents Christian burial: he cannot, therefore, cast it out, so as to expose the body to violation, or to offend the feelings or endanger the health of the living. In 2 Williams on Executors, p. 829, it is said that the executor must bury the deceased. In Ambrose *vs.* Kenison (10 C. B., 776) it is held that the husband is bound to bury his deceased wife, and the wife to bury the husband.

In recent times it is also held to be a matter of duty devolving upon the public authorities, and an interment will always be provided at the public expense where there is an inability to bury the dead on the part of surviving relatives, or an absolute refusal to do so for any reason.

II. In discussing the second division of the subject, viz., at burial, the questions of the choice of a burial-place and the right to exclude persons from a funeral may be considered.

First, the choice of a burial-place. In regard to this, it may be said that the legal complications resulting from the exercise of the choice, do not usually arise before interment, but far more frequently afterward when the question of removal comes up.

It is generally conceded that a testator has a right to select in his will a place of burial, and that this wish must prevail over that of his family in case it is known before interment (Brick Church Case, 4 Brad., 503). In a recent unreported New York case this acknowledged right of the testator was held to have lost its force when the body had been buried for some years before a will was found which expressly directed that it be buried in another cemetery. The Court refused under the circumstances to order a removal.

In Durell *vs.* Hayward (9 Gray, 248) Judge Bigelow said: "The indisputable and paramount right as well as duty of a husband to dispose of the body of his wife by a decent sepulture in a suitable place carries with it the right of placing over the spot of burial a proper monument or memorial."

In the absence of any testamentary selection, the cases seem to hold that the wishes of the husband or wife shall have preference over those of the next of kin. This is, however, an inference drawn mainly from the cases on removal of the dead (see Wynkoop *vs.* Wynkoop, 42 Penn. St., 293).

In regard to the second point, of the right to exclude persons from the funeral, it may be said that it is a matter of surprise to have such a right claimed, because all animosities between the living should be quieted in the presence of the dead. When the funeral services are held in a church this question will probably never arise; there was, however, not long since, in Rhode Island, a case where the person who had custody of the deceased and charge of the funeral services held them in his own house and forebade a certain other person to attend. The latter was forcibly excluded from the house and afterward brought suit for damages, on the ground that the service was one which the public had a right to attend. The Court decided, however, that the occasion was not so public as to carry with it this right, and that the ownership of the house gave the legal right to the owner to forbid the attendance of persons objectionable to him.

III. The third division is the body after burial. This is practically the question of removal, as the body, when once decently interred, is not likely to be the subject of litigation or interference except as the attempt to remove it is made.

The dead body may be removed by the cemetery authorities, by the health officials, or by the relatives, when proper cause is shown. The statutes of most of the States permit cemetery authorities to remove bodies once interred to other locations when some paramount public interest is involved.

The march of business may possibly render a neighborhood so valuable as to cause a graveyard to be closed and the bodies removed. This is not often done, because public sentiment would naturally feel aggrieved and oppose the removal, but the law, under careful restrictions

as to notice, permits such removal if the application be approved by the courts.

The supreme interest of the public health will also allow the removal of bodies when their continuance is prejudicial to the health of the living. This is paramount to all considerations of affection or sentiment.

It is, however, when the attempt to remove the dead body is made by relatives that the great body of litigation on the subject has grown up.

The law of burial, as regards the place selected and the right of permanent resting-place, was very fully discussed in 1856 by Hon. Samuel B. Ruggles, Referee (4 Brad. Rep., 503), in an application for the widening of Beekman Street, New York City, which case has been already cited. The widening of Beekman Street made it necessary to cut through certain vaults previously used for burial, and required the disinterment and reinterment of the bodies in some other place.

The body of Moses Sherwood was in one of these vaults, and his daughter, Mrs. Maria Smith, insisted that the body should be reinterred in a grave by itself, and the cost of removal defrayed out of funds in court. The Referee reported in favor of this claim, and the Supreme Court confirmed the report. The conclusions of Mr. Ruggles' elaborate argument were to the effect that the right to bury a corpse and to preserve its remains in the absence of testamentary disposition belonged to the next of kin exclusively; that the right to protect the remains included the right to preserve them by separate burial, to select the place of sepulture, and to change it at pleasure (1 Am. Law Rev., N. S., 62). This latter point has been somewhat restricted by more recent decisions, and Mr. Ruggles explains that the statement that the right to bury the corpse belonged to the "next of kin" was not intended to exclude the right of the husband in the case of the wife, or *vice versa*.

The cases where removal is attempted by relatives range themselves under the following heads:

1. The husband or wife has not an absolute right to remove the body against the will of the next of kin.

2. The next of kin cannot remove the body against the will of the husband or wife.

3. The next of kin cannot remove the body against the will of other next of kin of equal relationship, and public institutions have no rights as against the next of kin.

4. The owner of the lot has no such absolute right to the realty as to carry with it the ownership of the bodies buried in the lot. These are held in trust.

These points prove by the mere statement that an interment is not a slight matter, to be changed by sudden whim or impulse.

The law favors "the repose of the dead," and while reinterments are frequently made, it is generally in those cases where every one interested is agreed that such a course is the proper one.

1. In Wynkoop *vs.* Wynkoop (42 Penn St., 293), tried in 1862, it appeared that Colonel Francis Wynkoop had been buried in his mother's plot in Mount Laurel Cemetery. A few months later the widow applied to the Court, in the capacity of widow and also as administratrix of the estate, for an injunction restraining her husband's mother, sister, and brother from interfering with her plan of removing the body to another cemetery. The Court refused the application, saying: "The bill asserts a fixed legal right in the plaintiff in two capacities, (1) as administratrix and (2) as widow. As to the first, the absolute duty to bury terminated at the burial; second, as widow in this case she would appear to have no rights after the interment. Suppose a woman has had three husbands, who have all died leaving her a widow (3 Rawle, 304), is she to be burdened with the duty and vested with the charge of their three bodies against the express wishes of blood-relations and next of kin of each?"

The Court further said that "the fact that the body is deposited in the burial-place of his mother, in consecrated ground, and that he was buried with the ceremonies of the church and the honors of war, is sufficient to justify us in refusing permission to a removal under the circumstances."

A more recent case, Weld *vs.* Walker, tried in Massachusetts in 1879, is more favorable to the claim of the husband to remove the body of his wife, but still places some restrictions upon its exercise. In that case Mary P. Weld, wife of the plaintiff, died at Boston, in 1875, and was buried in Forest Hills Cemetery, in a lot belonging to the husbands of her two sisters. Mr. Weld owned a lot at the time in Mount Hope Cemetery, but allowed the interment to be made in the other cemetery. He afterward wished to remove the body to Mount Hope Cemetery, and alleged that in the resting-place where it was, he had no right to enter the plot to erect a monument or adorn the grave. In rendering the decision permitting the removal, Judge Morton said: "I think that the right to select the place of burial of the wife involves the right in the husband to change it, if from a change of circumstance or other good reason he desires to do so. The fact that the husband consented to the original burial is not conclusive against his right to make a change. It may be that the right of the husband is not an absolute right. If he should act in wanton disregard of the rights of the other relatives or of the feelings of the community, perhaps a court of equity would not aid him. But his rights will be protected by a court of equity when he acts properly. In the case at bar, the plaintiff gave a reluctant consent to the burial of his wife in the lot in Forest Hills Cemetery. This was not, however, expected to be her final resting-place, as the parties contemplated that, at the death of the husband, her remains were to be removed and laid beside his."

2. The next of kin have no absolute right of removal against the wishes of the husband or wife. In Secor's Case (31 Leg. Intel., 268), it appeared that the widow had buried the remains of her husband, when shortly afterward the son, who said that he had purchased another burial-place in accordance with the directions of his father, attempted to remove the body. The Court granted a perpetual injunction against any attempt of the kind, saying: "A proper respect for the dead, a regard for the tender sensibilities of the living, and the due preservation of public health, require that a corpse should not be disinterred or transported from place to place except under extreme circumstances of exigency."

3. The next of kin have no fixed rights as against each other, and public institutions have no rights at all against the next of kin. The case of Lowry *vs.* Plitt (11 Am. Law Review, 781) is a Pennsylvania case tried in 1877. Mrs. Lowry, at the time of her death (1866), had no burial-place and her children also had none; she was therefore buried in the lot belonging to her sister, Mrs. Plitt. Three years later one of her sons died, leaving $5,000 for his executors for the purpose of erecting a family tomb, where should be placed his own body, that of his mother, and other members of the family, if they desired. The executors with another of the sons applied to the court for permission to remove the body from Mrs. Plitt's lot. One of the sons joined Mrs. Plitt in opposing the removal and the Court refused to permit it, saying: "The law favors the repose of the dead. When they are inurned in the places selected by them, it must be something more than sentiment or abstract right which will induce us to enforce the claim of the next of kin by the invasion of the burial-place of another. In such case it may well be questioned whether a right of the next of kin exists at all."

It occasionally happens that the prominent position of the deceased, especially in political matters, makes the question of removal a public one. An illustration of this is found in the desire of Congress, expressed many years ago by a resolution, to remove the body of George Washington from Mount Vernon to the Capitol, but the legal

representatives declined to permit it and the matter was dropped. The City of Philadelphia, in the case of Stephen Girard, the celebrated philanthropist, desired to remove his body from Holy Trinity Church, but the court intervened to prevent the desecration (4 Am. Law J., 97).

4. The owner of a burial-lot holds the bodies buried in it under a trust. This was decided in Pierce *vs.* Swan Point Cemetery (10 R. I., 227). Mr. Metcalf, the deceased, was buried in a lot belonging to himself in Swan Point Cemetery. This lot fell by inheritance to his only daughter, Miss Almira F. Pierce. Thirteen years later the widow, Mrs. Metcalf, removed the remains to another plot, and Mrs. Pierce applied to the courts for an order directing their return to the first resting-place. The Court directed this to be done, saying in the opinion: "The person having charge of a dead body cannot be considered as the owner of it in any sense whatever. He holds it only as a sacred trust for the benefit of all who may from family or friendship have an interest in it, and we think that a court of equity may well regulate it as such, and change the custody, if improperly managed. So in the case of the custody of children, certain persons are *prima facie* entitled to their custody, yet the Court will interfere and regulate it." The position of the Court was that the ownership of a burial-lot was a trust to be regulated like other trusts, and did not permit the ordinary exercise of the rights of absolute uncontrolled ownership.

This theory of the trusteeship of the owner of the burial-lot is an advance upon former decisions, and in principle would properly apply not merely to the owner of the lot, but to any one who by kinship, such as husband, wife, father, or child, has a claim to the custodianship.

The last important case on the subject, that of Weld *vs.* Walker (*supra*), goes farther than this one in Rhode Island, and, while recognizing a trusteeship to be regulated by a court of equity, states that the husband has a right to remove the body of his wife, "if from a change of circumstances or other good reasons he desires to do so."

The judge of what constitutes the "change of circumstances or other good reasons" is not the husband himself, but the Court to which the facts are made known. There is no criterion by which a person can determine in advance the right of removal. Each case will have to be judged by itself, with the certainty that the Court will favor the "repose of the dead."

DOES LARYNGEAL STENOSIS CAUSE PULMONARY HYPERÆMIA?

By R. VAN SANTVOORD, M.D.,

NEW YORK.

In The Medical Record of May 30, 1885, Dr. J. E. Winters answers certain critics who have ventured to question his assertion that prolonged croup leads to congestion, splenization, and œdema of the lungs, and he cites an apparently formidable array of authorities in his support. I should like to say a few words in answer to his article.

It is not to be denied that if stenosis of the larynx resulted in a more or less enduring increase of the mean negative pressure within the lungs, the congestive phenomena so well outlined by Dr. Winters would probably be occasioned. Such a mechanism appears to be exemplified in many deaths that occur from rapid suffocation in previously healthy subjects. Tidy (vol. ii., p. 339) states that in death from asphyxia the "lungs in most cases are gorged with blood." Many cases of suffocation may be cited in demonstration, such as that of a man suffocated by inhaling a piece of potato-skin into the larynx, in whom congestion of the lungs and right cavities of the heart was found,[1] or the case of a workman smothered in sand, in whom intense uniform congestion of the lungs was found.[1]

M. Tardieu, in commenting on a case under discussion,[2] speaks of the finding of a quantity of foam containing very fine bubbles as precisely the state of affairs almost constant in strangulation and suffocation. In cases of death in which occlusion of the air-passages might be supposed to have been the principal factor, the absence of congestion or œdema of the lungs may often be plausibly explained by supposing that the blood-vessels of the lungs have expelled, by post-mortem retraction, the excess of blood that existed in them during the active struggle for air, or death, though apparently due to obstruction of the air-passages, may in reality be caused by some other factor, as shock, etc. Dr. Loeven[3] found that when a ligature was suddenly tied around the trachea of a rabbit so as to *totally* occlude it, death resulted after only two or three convulsive inspirations. After section of the pneumogastrics the same procedure caused death from gradual asphyxia in about a minute. The possible factors that may cause death in apparent asphyxia are discussed in works on medical jurisprudence, etc.

It is conceivable that death might occur in diphtheritic croup from the sudden occlusion of the larynx by a detached piece of membrane, or from the sudden stoppage of a tracheotomy tube, and in these cases congestion of the lungs might indeed be produced as in the above-cited instances. As a rule, however, we have to do with a *stenosis* causing dyspnœa, which lasts for hours and perhaps days, with exacerbations and remissions produced by temporary lodgment of secretions in the narrowed air-tube, etc. It is my belief that under these conditions the violent inspiratory efforts of the patients draw in more air past the obstruction than is forced out again, the result being that the mean pressure in the interior of the alveoli and bronchi is greater than normal, and that this increased intra-alveolar pressure more than overcomes the tendency to pulmonary congestion, which otherwise would exist. This belief is founded on the facts that in persons suffering from laryngeal or tracheal obstruction the chest is observed to be greatly distended, and in the examination of the lungs removed post mortem from patients who have died with narrowed air-passages an amount of emphysema is seen, which to me appears more extensive than could have been caused secondarily to other lesions. I have made fourteen autopsies on children who have died in the Randall Island Infants' Hospital from diphtheria with laryngeal stenosis, tracheotomy not having been performed in most of them. In all extensive bronchitis existed. In all but one catarrhal pneumonia is recorded as having been found. It is possible that among the earlier of these I recorded some cases of atelectasis with congestion as pneumonia.

These cases were, for the most part, in foundlings, in whom uncomplicated bronchitis is very common, or in diphtheria following measles or scarlet fever. The percentage of pneumonia is, then, far larger than might be expected in the ordinary run of cases, judging from the records of other observers. In one case only was there any pulmonary congestion that was not accounted for by pulmonary collapse or pneumonia. The latter did not differ, in character or distribution, from similar lesions found in cases of bronchitis in which no laryngeal lesions exist. The emphysema, in cases which I have seen since, being especially interested in the subject, seemed more extensive than would be expected as a secondary effect of the inflammatory lesions, although it must be confessed that uncomplicated bronchitis in children is often attended by a good deal of emphysema. It seems probable, however, that the distention of the lungs found post mortem does not fully represent their distended condition during the active struggle for breath before death.

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[1] Taylor's Medical Jurisprudence, vol. ii., p. 90.

[1] Chever's Medical Jurisprudence, p. 622.
[2] Annal. d'Hyg., 1855, p. 139.
[3] Les diverse formes d'Asphyxie, Gaz. des Hôp., xlv., pp. 68–74, 1872.

My own experience confirms the description given by Oertel, to whom Dr. Winters appeals, unless when Oertel writes of hyperæmia of the lower lobes, etc., he means a hyperæmia distinct from that which always accompanies atelectasis and broncho-pneumonia. The high position of the diaphragm spoken of by him would result from the atelectasis. Oertel says nothing about the mode of production of these lesions, beyond what may be inferred from his statement that the consolidation found in such lungs is identical with what is usually called "catarrhal pneumonia." As in my fourteen cases I found only one of diffuse hyperæmia and one of diffuse œdema, I believe that these conditions, being exceptional, must have been due to something else than the laryngeal stenosis.

I shall not attempt to follow Dr. Winters in his copious citation of authorities. I prefer to appeal to the results which have been found to follow artificial obstruction of the air-passages in previously healthy animals, as these results show the effect of uncomplicated stenosis, and afford a solid basis of fact which is far more satisfactory than an attempt to interpret directly complex phenomena which have to do with so intricate a subject as the physiology of respiration and its effects under different circumstances on the pulmonary circulation.

Köhler[1] produced tracheal stenosis in healthy animals by twisting lead-wire about the trachea so tightly that marked dyspnœa was caused. The immediate effect of the ligation was marked diminution of the number of respirations per minute. In every case respiration was so increased in depth that more air was inspired and expired at each respiratory act than in normal respiration. In rabbits the total amount breathed in a minute was less than normal. In dogs and cats, however, a given volume of air was inhaled and exhaled in about one-half the time in which it would have been done normally. Up to a certain point the frequency of respiration diminished, the amplitude of respiration and total amount of air breathed increased with the increase of the obstruction.

After from three to five weeks, respiration would again approach its normal frequency, and the animals would die from the following secondary changes in the heart and lungs: First, a high degree of dilatation of both heart-cavities; second, a very intense hyperæmia of the lungs, such as is otherwise seen only as the result of lesions of the cardiac valves, with unaltered parenchyma; third, extensive vesicular and intralobular emphysema; fourth, the finest bronchi were filled with catarrhal secretion.

In the production of this emphysema Köhler mentions two factors: First, paralysis of bronchial muscular fibres, which takes place gradually as the result of over-exertion incident to very deep inspiration; second, the limited outflow and stagnation of the bronchial secretions caused by the tracheal ligature.

Bernard[2] states that "it is certain that in violent inspiratory efforts the pulmonary tissue may break and tear," and that he has seen the lungs become emphysematous, in previously normal animals, after breathing irrespirable gases. He states also that the same effect is produced by the slow and labored breathing following section of the pneumogastrics. More or less extensive rupture of alveoli is seen in many cases of rapid asphyxia, as in death from strangulation (Tidy, vol. ii., p. 429). This tearing takes place more readily in the tender tissues of young animals than in the old (Bernard). It is therefore an established fact that pulmonary emphysemas found after death from stenosis of the upper air-passages may occur entirely independent of previous collapse or other lesion.

Köhler found also extensive hyperæmia of the lungs, a hyperæmia such as is commonly seen only as the result of lesions of the cardiac valves. He states that this hyperæmia was due to the secondary giving out of the heart and vaso-motor centre. The right side of the heart is strained by the large amount of blood aspirated into it by the distention of the thorax, by the increased positive intra-pulmonary pressure caused by deep inspiration, by which the passage of the blood through the lungs is rendered difficult, and by the "vesicular and intralobular emphysema which develops inevitably after long-continued mechanical obstruction to respiration." This emphysema, he states, "gives rise to marked contraction of the capillaries of the affected parts, and from this results again obstruction to circulation (checking the flow of blood in the central vessels), accumulation of carbonic acid from lessened exchange of gases, and so to deficiency of oxygen."

The special strain on the left heart comes mainly from the increased blood-pressure in the peripheral vessels, which has been shown to exist (Köhler) in animals with stenosed trachiæ. The contraction of the peripheral vessels giving rise to it, results from irritation of the vagi and the constant muscular effort of labored breathing. This last factor, of course, makes large demands on the heart as a whole.

In one of my own cases, above referred to, diffuse hyperæmia of the lungs existed, in another œdema. In these two, cardiac changes secondary to the stenosis may have occurred. In the others, the absence of any hyperæmia "resembling that seen otherwise only as the result of valvular lesions of the heart," would seem to indicate that death resulted from causes other than heart-failure secondary to laryngeal stenosis.

Finally, Köhler found that the smaller bronchi were filled with catarrhal secretions. This condition recalls Niemeyer's statement that bronchial catarrh is a necessary consequence of laryngeal stenosis, because the rarefaction of the air in the lungs caused by the obstruction to entrance of air during deep inspiration must cause hyperæmia, just as would a cup applied to the skin.

Dr. Winters alludes to this explanation, and to the criticism on it by Steiner, in his article on croup in Ziemssen's "Encyclopedia," with great emphasis. Steiner's comment is, "Niemeyer seems to me in this explanation of catarrh in croup, which indeed is not to be disputed, to lay too little stress on the condition of inflammation of the air-passages, and too much on the mechanical factor." The considerations given above, together with the fact that in long-standing tracheal stenosis dilatation of bronchi below the stenosed point exists,[1] seem to indicate that this mechanical factor, in laryngeal *stenosis*, has no existence. Köhler incidentally states in his above-quoted article, that rabbits, which can live for weeks in a state of marked dyspnœa from a ligature about the trachea, die in from twelve to thirty-six hours from catarrhal pneumonia if the mucous membrane of the air-passages is exposed. Certainly, with them direct irritation causing inflammation vastly outweighs the mechanical factor, if indeed the latter exists at all. Köhler's statement that the accumulation of mucus in the air-passages of the animals experimented on is due to the stenosis of the trachea, seems most probable, especially as no catarrhal pneumonia resulted. In the human subjects under discussion the bronchitis results, I believe, from the extension of the inflammation downward, as a rule. The obstruction of the air-passages, by preventing the egress of inflammatory products, may indirectly favor the development of collapse and broncho-pneumonia; and early performance of tracheotomy may, *after inflammatory changes have developed below the point of obstruction*, do something toward limiting their extent. The above-mentioned fate of the rabbits in whom the air-passages were opened recalls dangers resulting from operation upon which little stress has been laid in the present discussion.

To recapitulate, I believe that it has been proved:

[1] H. Köhler: Archiv für exper. Pathol. u. Pharmakol., vii. p. 1, 1877.
[2] Leçons sur les Anesthésiques et sur l'Asphyxie, p. 347. Paris, 1885.

[1] Riegel: Ziemssen's Handbuch, B. v., Hft. 2, p. 234.

1. That total or almost total occlusion of the air-passages may give rise directly to pulmonary hyperæmia. 2. That tracheal or laryngeal *stenosis* does not give rise directly to pulmonary hyperæmia, but, on the contrary, to over-distention, emphysema, and anæmia of the lungs; *secondarily*, heart-failure and consequent congestion of the lungs may occur. 3. The pneumonia found complicating laryngeal croup is catarrhal pneumonia developing from the extension of the inflammation downward, just as would happen if no stenosis existed. The only effect the latter has upon its development is indirect, in that stenosis of larynx or trachea prevents the free egress of bronchial secretions.

There are good reasons for the early performance of tracheotomy, but the danger of pulmonary congestion, "splenization, and œdema" occurring as a direct result of laryngeal obstruction, is not, in my opinion, one of them.

DIAGNOSIS OF CATARACT WITHOUT THE AID OF AN OPHTHALMOSCOPE.

By C. A. BUCKLIN, M.D.,

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The first class of cases having cataract who call on their physician for advice are those who have exhausted the resources of the optician in trying to obtain glasses, without success. Before taking the necessary steps to establish the diagnosis of incipient cataract, the observer should exclude a few common causes of imperfect vision, for the simple reason that should he examine for cataract and fail to find it, he would be prevented for several days from excluding several other common causes of defective vision.

Irregular forms of refraction, which the optician would probably overlook, are excluded by directing the attention to a large clock-dial at ten feet; if some two opposing figures are decidedly darker than any other figures on the dial, there is an irregular refractive error which requires correction. If the figures all appear *equally* dark, this irregular form of refraction can be excluded with reasonable certainty.

Should the pupils be very large, one would be suspicious of glaucoma; while if, on the other hand, they are small, this disease is excluded with reasonable certainty, provided neither eserine nor atropine has been used. You may next proceed to the demonstration of the existence of incipient cataract.

Drop one or more drops of a solution of atropine, containing one grain to two fluidrachms of water, in the eye. If the pupil dilates full and round, another common form of disease which is frequently mistaken by the inexperienced observer for cataract is excluded, namely, attachments of the iris to the lens with exudation into the pupil.

The pupil being fully dilated, the room is darkened as well as possible. To examine the left eye, place a lamp to the left hand and a little in front of the patient; it should be at about the same height as his eye. You should carefully focus the light on the dark, large pupil with a magnifying glass (Nos. 2, 3, or 4 will answer best). The light should be so thrown upon the pupil that a line passing through the centre of the lens would form an angle of forty-five degrees with the line representing the optical axis of the eyeball. If there are any opacities in the lens, you will see them as small punctate spots.

To examine the right eye, the position of the lamp or patient is so changed that the light may be focused upon the pupil at a corresponding angle. Light thrown by a concave mirror into the eye will show these spots as black specks on a red ground.

The second class of cataract cases who consult their physician are those who have a white spot in the pupil, which is so easily seen that the most careless observer cannot fail to see it.

The questions which immediately arise are: Is it complicated? Is it ripe? Can it be cured?

At the present day it is only necessary for the successful removal of cataract that the patient, with back to the window, can no longer count fingers at a greater distance than two feet, and can distinguish the light from a candle in a dark room at fifteen feet, equally well when held above, below, to the right, and to the left of the eye. I consider these requirements the minimum which is necessary to make one confidently expect satisfactory results. If they can count fingers at a greater distance than two feet it is very questionable if the cataract is ripe enough to warrant one who makes any pretence of being conservative, in operating. I have operated with good results, and without any reaction following the operation, where the person could count fingers promptly at three feet. You are very apt, however, in these cases, to leave too much of the cataract in the eye.

There are occasional cases where the changes are principally in the cortex of the lens and its nucleus is perfectly clear. Such persons may count fingers at a great distance, and still be ready for operation. On the other hand, the change in the lens may be chiefly in the nucleus, and only slight changes in the cortex, in which case, although the fingers were counted badly, the cortex would stick to the capsule when the lens was extracted. The physician can only depend upon the distance at which fingers can be counted when the back of the patient is turned to the light of the window for his measure of the degree of development the cataract has attained. The less the distance at which the fingers can be counted, and the greater the distance at which the light can be seen, the greater are the chances for a favorable result.

When one considers that some respected authorities state that if fingers can be counted, "it precludes the idea of an operation in ordinary cases of cataract," it will be at once seen that what I state as being the minimum requirements are much more liberal. I ask for no riper cataract than one through which fingers can be counted at twelve inches only. I do not hesitate when they can still count fingers at two feet, and have repeatedly operated where fingers could be counted at three feet. No experienced specialist would ever allow any process of artificial ripening to be practised on his own eye.

The statements I make regarding the necessary requirements to make the prognosis in cataract operations favorable are based upon my own personal experience, and have not been influenced by the data or dogmas of other operators. I would never think of operating on an unripe cataract without making the peripheral cut in the capsule. I consider all other methods of opening the capsule objectionable where fingers can be counted.

The time having arrived when a cataract can be removed, all delay beyond this period only increases the chances of accident. The vitreous may become fluid and the chances of intra-ocular hemorrhage be increased by the same degenerative changes which cause the lens to atrophy.

Diabetes in India.—Glycosuria is frequent among rich elderly natives in Calcutta, many of whom are fat and indolent and immoderately fond of sweetmeats. Dr. Norman Chevers states that he has heard of several fatal cases of carbuncle in such diabetic patients. Writing in 1871, the editor of the *Indian Medical Gazette* remarked, that he believed that "among the upper and middle classes of natives in Calcutta, almost every family had lost one or more of its members from diabetes."

Poem of the Occasion.—The following has been sent us by a delegate:

There was once a great medical meeting
To arrange to give Europe a greeting;
Said they all, Well, we guess
We can kick up a mess,
So each one for his State began bleating.

Clinical Department.

STRICTURE OF THE URETHRA FOLLOWING MASTURBATION—INTERNAL URETHROTOMY—RECOVERY.

Dr. William Stone Torrey reports the case of a young man seventeen years of age who consulted him concerning an acne of the face which he asserted was due to masturbation. Examination showed a redundant and constricted prepuce, a contracted meatus, and an organic stricture of the urethra. The stricture was located one inch above the meatus, and extended upward a distance of two and a quarter inches. Its calibre was 25 mm., the normal calibre of the urethra being 34 mm. Circumcision was first performed, and when the wound had healed an Otis' urethrotome was introduced and dilated up to 34 mm., and the stricture was divided along its whole extent. Previous to the operation one-half drachm of a four per cent. solution of cocaine was injected and allowed to remain for about five minutes. The subsequent incision of the meatus and division of the stricture were accomplished without the slightest pain to the patient. The stricture was tough and fibrous, and was remarkable in its extent and consistence, as masturbation was the sole cause, the patient never having been the subject of a gonorrhœa.

THE CAUSE OF CORNEAL OPACITY FOLLOWING INSTILLATIONS OF COCAINE.

Dr. J. Craft, of Cleveland, O., offers an explanation of the evil results sometimes observed to follow the continued employment of cocaine after operations upon the subconjunctival tissues. He recalls the fact that the drug acts not only as a local anæsthetic but also as an excitant of the vaso-motor nerves, causing a marked depletion of the vessels of the part. "Now I can readily see that in an operation upon an eye in which the conjunctiva is healthy and its vessels scarcely discernible, this second action might be overlooked. And the repeated application of cocaine, to relieve any pain subsequent to the operation, might occasion such absolute depletion of the vessels as to produce turbidity, and finally even necrosis of the cornea from lack of nutrition. Atropine instilled into the eye reverses this state of affairs; vaso-motor irritability is overcome, reaction ensues, and the turbidity of the cornea clears up. Such, I conceive, from my experience with cocaine, is the cause of the unpleasant effects recently reported." Dr. Craft suggests that the artificial production of anæmia may be prevented, without impairment of the anæsthetic effect, by the addition of a little atropine to the cocaine solution.

TWO CASES OF ACUTE MYRINGITIS RELIEVED BY COCAINE.

Dr. B. J. Baldwin, of Montgomery, Ala., has recently seen two cases of acute inflammation of the membrana tympani which were speedily and effectually relieved by instillations of cocaine. The first case was that of a young lady who had suffered intensely for two days, obtaining no relief, from any of the ordinary remedies. There was a blister the size of a hemp-seed in front of the umbo. The Doctor had refrained from using cocaine, relying upon the assertion of Knapp that the drum-membrane was unaffected by this drug. However, he determined to try it at last, and was no less delighted than astonished to find the pain entirely relieved in six minutes after two applications. The blister disappeared and the ear was well in four days. The second case was that of a man, twenty-four years of age, an inspection of whose drum-membrane showed a tense, yellowish, transparent blister involving the posterior and superior portions. This disappeared in two days without having ruptured. The patient suffered agony for a few hours until a cocaine solution could be obtained, but within seven minutes after the instillation of a few drops of a four per cent. solution was entirely free from pain, and remained comfortable under repeated applications of the drug during the three subsequent days of active inflammation. Dr. Baldwin recognizes that two cases are not enough to base any positive conclusions upon, but he maintains that they are amply sufficient to controvert Knapp's statement to the effect that cocaine will not anæsthetize the drum-head.

MORE FAILURES WITH CHLOROFORM IN THE TREATMENT OF TAPEWORM.

Dr. Charles G. Duncan, of Socorro, N. M., writes that he has met with three failures in the past year in the use of chloroform in tapeworm. The mixture which he employed was as follows: ℞ Chloroform, one drachm; castor-oil, two ounces; croton-oil, one-half drop; mucilage of acacia sufficient to make an emulsion. The remedy was given after a fast of from twenty-four to thirty hours, and in no case was the entire worm expelled. The Doctor subsequently cured these and several other cases with the mixture of pomegranate bark, pumpkin seed, ergot, male fern, and croton-oil, as given in The Medical Record of July 12, 1884.

COCA IN PHTHISIS.

Dr. J. Blake White, of 941 Madison Avenue, states that he has for several weeks been testing the effects of coca in phthisis, and the results thus far obtained tend to confirm his belief in the therapeutic value of the drug in this and other wasting diseases. "Prescribed in some cases of advanced phthisis associated with great physical depression it exerted a wonderful tonic effect, substituting a cheerful and hopeful state for one of despair, and in proportion establishing an improved condition of health. In some cases in which night-sweats were quite profuse the remedy seemed to have exercised a controlling influence. A more refreshing repose and a better appetite were observed in patients who had taken the wine of coca for a week or more, when prior to this treatment insomnia and anorexia were painful symptoms." Dr. White adds that coca is now being thoroughly tested in his service in Charity Hospital, and he hopes to be able to supplement this notice with a more full report concerning the value of the drug in the management of consumption.

RECOVERY FOLLOWING VERY RAPID CARDIAC ACTION IN AN ADULT.

Dr. Walter F. Morgan relates a case of puerperal convulsions occurring in a primipara, an inmate of the Kansas Home for the Friendless. There were about forty distinct paroxysms, with the usual biting of the lips and tongue. There was stertorous breathing, the patient was profoundly insensible, and the axillary temperature was 103° F. "The peculiarity of this case was that, although the pulse was as high as 180 per minute, and was very weak and fluttering, the patient finally recovered. Ringer states that in febrile diseases, when the adult pulse reaches 160, the patient almost always dies. In deference to this statement and influenced also by a previous history of defective heart action and by the symptoms as a whole, I gave an unfavorable prognosis."

How the French give Castor-oil to Children.—A French method of administering castor-oil to children is to pour the oil into a pan over a moderate fire, break an egg into it, and stir up; when it is done, flavor with a little salt or sugar or currant-jelly.

Progress of Medical Science.

HYDROPHOBIA FOLLOWING A RAT-BITE.—A young sailor, aged twenty years, engaged in the coasting trade in France, was bitten during sleep, some time in December, 1883, by a large gray rat, first in the upper lip, and then four times in the left hand. The wounds healed quickly and kindly, not having even bled. But after a fortnight swelling came on in the bitten hand, combined with fever and diaphoresis. These passed off, but returned again in the course of a few weeks, to be followed, in January, by a sudden appearance of purpuric spots on the bitten arm, the thorax, and the back. These disappeared under the influence of collodion and acid drinks, but during the whole time the patient was subject to nervous dysphagic attacks, during which the face became congested, a constriction was felt at the throat, with whistling respiration from closure of the glottis, and he could neither speak, swallow, nor breathe freely. On February 27th he came under the care of M. Millot-Charpentier, who at once thought of hydrophobia, an idea which had not been present to the patient's mind at all. He was then very anæmic, with purpuric spots, a daily recurrence of the nervous symptoms, and an attack of fever every three or four days, lasting for some hours. He was ordered a tablespoonful of a one per cent. solution of permanganate of potash three times a day, nine grains of quinine every evening for fourteen days, and afterward on alternate evenings, and once a week a saline purge in some bitter infusion, with nitrogenous diet, exercise, and medicinal doses of alcohol. In the course of the next month he had only two severe attacks, but on March 28th a small tumor, of the size of an egg, and of a violet color, appeared in the region of the last rib on the injured side, accompanied by more ecchymosed spots. With this was combined excessive muscular weakness, so that, when seated, he was unable to rise without assistance. The treatment was continued with good results; the condition gradually improved, and in November he could be looked upon as cured. While the symptoms had a great resemblance to those of hydrophobia, they were also very like those of snake-bite, especially the purpura, the muscular weakness, and the great anæmia; and the case shows the connection which exists between different forms of animal poison introduced by means of a bite.—*The London Medical Record*, May 15, 1885.

HERNIA OF THE LUNGS INTO THE NECK.—Surgeon-Major Knox describes two cases of displacement of the lung into the neck. The first occurred in a thin, delicate man, aged twenty-two. He had been healthy up to December, 1882, when he was admitted into hospital with bronchial catarrh, and remained one hundred and forty-six days under treatment. In February, 1884, while on the march, he had a violent fit of coughing, and felt something give way in the left side of the neck. After a short rest he walked back to camp, and discovered a tumor above his left clavicle, of the size of a hen's egg. The man continued on duty until June, 1884, when he presented himself at hospital complaining of slight pain in the chest, with dyspnœa on exertion and dry cough. The tumor was examined, and found to be soft and compressible. On auscultation respiratory sounds were audible over it, accompanied by small, dry crackling râles. The left lung was emphysematous. The patient remained in the hospital until December, 1884, during which time the hernia increased to the size of a large orange, but the general condition remained the same. The second case occurred in the practice of Dr. Wilkin. The patient was an Indian, who was admitted into hospital suffering from fever and general debility, and who frequently had attacks of asthma. Six days afterward the man died suddenly from syncope, about half an hour after returning from the latrine. At the post-mortem examination the left lung was found to beemphysematous, especially along the anterior border and at the apex. The right lung was emphysematous on the anterior border; the apex was protruded beneath the clavicle into the neck, and was dilated into a translucent tumor, about the size of a man's fist, in which most of the alveolar structure of the lung had disappeared.—*London Lancet.*

SYPHILIS AND TABES.—Professor Eulenburg, of Berlin has published an article on the question, so much discussed of late years, concerning the relation between syphilis and locomotor ataxia (*Virchow's Archiv*, January, 1885). The following propositions represent the views which he now entertains on the subject: 1. There is an absolute and relatively somewhat large percentage of tabetic patients who have suffered from syphilis; the number of these is considerably larger than was generally admitted until within the last few years. 2. The exact relation of syphilis to tabes is uncertain. Probably in most cases syphilis acts only as a debilitating predisposing cause, like many other agencies—such as heredity, mental affections, etc.; but perhaps in some instances syphilis is the direct cause of tabes. 3. At any rate, syphilis can hardly be considered to be the most frequent and most important cause of tabes. 4. The cases of tabes which have been preceded by syphilis present no constant and characteristic symptoms, nor any peculiarity in their course, by which they can be distinguished from other (non-syphilitic) cases. 5. As regards prognosis and treatment, also, there is no clear and characteristic distinction between the two classes of cases. Those with syphilitic antecedents may in certain circumstances improve, perhaps even recover, either with or without specific treatment; while, as a rule, such treatment is either of no avail or only attended by temporary benefit. 6. The investigation of the etiology and pathogeny of tabes in relation to syphilis, which has been prominent of late years, has not yet afforded any definite solution of the question; nor, according to the experience of the author, can the discussion be said to have yet led to any permanent result as regards the best treatment of tabes.

IS TUBERCULOSIS TRANSMISSIBLE THROUGH THE SPUTUM?—Sirena and Pernice have carried out a series of experiments concerning the transmissibility of tuberculosis through the agency of tubercular sputum. The animals employed in their studies were rabbits and guinea-pigs. Their conclusions may be summed up as follows (*Gaset. degli Ospitali*): The liquid obtained by the evaporation of tubercular sputum is always free from Koch's tubercle bacillus; therefore, when placed upon the cornea, injected into the subcutaneous cellular tissue, or into the peritoneal cavity, it does not give rise to tubercle. 2. Tubercle bacilli do not rise in an atmosphere moving over moist tubercular sputa, even when the sputa are very rich in bacilli. 3. The respiration for several hours, or even for several days, of tubercular exhalations does not give rise to phthisis in animals. 4. Animals obliged to respire an atmosphere charged with the dried dust of tubercular sputum do not catch phthisis. 5. The subcutaneous injection of tubercular sputum produces for the most part a specific abscess, as is proved by the presence of the tubercle bacillus in the pus; then, after a variable period, it produces tuberculosis of the abdominal and thoracic organs. 6. Injection of tubercular sputum into the peritoneum produces at first local and then general tuberculosis, capable of successive inoculations in animals. 7. The injection of solutions of tubercular sputum into the trachea, even in animals affected with bronchopneumonia, does not cause a specific infection, but for the most part a septic croupous pneumonia, characterized by the existence of micrococci in the exudation.

GRADUATION OF A CHINESE LADY.—Miss Hai-Mè King, a native of China, received the degree of M.D. at the Commencement of the Women's Medical College on May 29th.

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THE RESULTS OF COLLECTIVE INVESTIGATION REGARDING OLD AGE.

WITH every year the average duration of life is increased, and we have more old people on our hands. Naturally, the question becomes of increasing interest, how shall we secure a healthful old age, and how can we prolong in comfort this senility.

Some curious information regarding this subject, though more especially regarding what may be called "centenarianism," has been published by a gentleman of Syracuse, N. Y., who, we are informed, has collected the histories of 10,000 people that have passed the age of one hundred years. According to this authority, the United States leads in centenarian longevity, while Connecticut is ahead among the States. As to sex, women; as to occupation, soldiers, sailors, and farmers are the longest lived. Among the professions, 100 ministers, 30 doctors, and 10 lawyers reached their centennial.

Of more practical and scientific character are the statistics regarding longevity obtained by the British Collective Investigation Committee. These are based upon over five hundred returns, and relate to persons who have reached or passed the age of eighty.

Professor Humphrey, of Cambridge, has given some interesting deductions based upon these returns in an oration recently delivered before the Medical Society of London.

The first requisite for longevity must be an inherent quality of endurance, a something which is inborn and perhaps inherited. It is noticeable that the phthisical taint does not necessarily lessen the capacity for longevity. Among five hundred aged persons, phthisis appeared in fathers, mothers, brothers, or sisters of eighty-two, that is, in about seventeen per cent. In one case both father and mother were phthisical.

A second requisite for long life is freedom from exposure to casualties. It is on this ground, in part, that more women than men reach extreme age. Other reasons, however, are, perhaps, a greater natural vitality, since even in early life the mortality is less among females than males. It does not seem to be proved by the data collected that short and small men and women have any advantage over those who are taller and larger. The average height of old Englishmen is 5 ft. 6 in., that of women, 5 ft. 3 in.

Professor Humphrey would limit quite sharply the changes which normally occur in old age. They are quantitative rather than qualitative. There is a diminution in material and force, with perhaps a slight increase in the oily matter of the tissues—all other changes are pathological.

Among the most marked of senile changes are those of the bones. These lose in weight, but not necessarily in size; indeed, they may even increase in size by a sub-periosteal ossification. The interior of the bones becomes softened and filled with marrow; the walls become thinned. The ends of the bones are particularly affected in this way, and hence the liability of the bones to fracture at these parts. The alveolar processes waste away, so that in men above eighty the number of teeth is only six, while in women it is but three. The cranium generally becomes thinner and lighter. In some cases, however, the skull-walls are actually increased in density and thickness by the osseous deposits on the interior of the brain-case.

Contrary to a generally received view, the cartilages of healthy old people do not calcify and harden, but remain elastic. They, however, undergo some atrophy, which accounts for the decrease in height.

In the same way Professor Humphrey believes that calcification of arteries is not a process normal or common in advanced age. Among 382 returns relating to the pulse, it was found incompressible in only 72. In 362 returns, the arteries were found knotty in only 40. We cannot, however, place very much dependence upon such data.

The rate of the heart-beat in old age has been said by some physiologists to be increased, by others to be diminished. The Collective Investigation shows that there is not much change. From the age of eighty to ninety it averages 73–74 in men, 78–79 in women. The respirations are a little increased in frequency, especially in women. Urinary troubles are a well-known source of discomfort and suffering among old people. They do not, however, necessarily attend the decline of life. Among 157 males from eighty to eighty-five years of age, only 6 had any disease of the prostate or bladder. In the next half decade, however, the proportion was greater.

In old people wounds are known either to heal rapidly or to slough. The reparative process is often as rapid as in the young.

Sir Henry Thompson in a recent article on "Diet in Relation to Age," has called attention to the harm that comes from attempts to over-feed old people. They are injured, he truly says, by the solicitous relatives, who think that in feeding there is sure help for the waning strength. The old need a light diet to correspond with the lessened work and slower nutrition and waste of their tissues.

NITROGEN IN PHTHISIS.

THE first physician who ever studied the medicinal properties of nitrogen was an American, Dr. Winthrop Saltonstall (New York, 1796), who evidently got his ideas from his teacher, Dr. Mitchell. Dr. Saltonstall's essay was of a fanciful character and added nothing to practical knowledge. Another and more valuable contribution was made by Dagoumer in 1816. Subsequently Nysten, a co-worker of Bichat, injected nitrogen into the veins of

animals, and found it to have a sedative action upon the heart. In 1829 M. Marc, in the "Dictionnaire de Therapeutique," cites cases in which inhalations of nitrogen were used with good effect in phthisis.

Demarquay in his "Pneumatologie Médicale," 1866, describes two series of experiments with nitrogen. Injected subcutaneously, or into the peritoneum, it caused an increase in the exhalation of oxygen and carbonic acid. Applied locally to wounds it had some slight sedative effect.

Of late years a number of carefully conducted experiments have been made in order to determine the exact status of nitrogen as a remedy in pulmonary troubles. The names of Valenzuela, Treutter, Siefermann, Mermagen, Krüll, Kohlschulter, are associated with these experiments. Dr. Treutter, of Blasewitz, has recommended for some years inhalations of rarefied or partly deoxidized air in phthisis. In 1879 he ventured the opinion that the nitrogen was actively beneficial. Mermagen has affirmed this view with much more positiveness, and gives experimental data in support. Siefermann in a review of the subject (*Gaz. Méd. de Strasb.*, January 4, 1885, *Lond. Med. Record*, May, 1885) states that when patients are made to breathe air to which nitrogen has been added in the proportion of two to seven per cent., certain well-marked symptoms are observed, and these are repeated so constantly as to justify the belief that they are to be referred to the inhalations. With the first inspirations the patients assert that they breathe more easily, the dyspnœa diminishes, and a general sensation of well-being supervenes. The pulse becomes small, often filiform, from contraction of the radial artery. The patients—weak, anæmic, and nervous—experience, during the operation, vertigo, a sensation of weakness and pressure on the head, which may occasionally lead to syncope. The symptoms only are observed in the first two or three sittings.

According to Krüll and Mermagen the best therapeutical results are obtained when from two to seven per cent. of nitrogen is added to the atmospheric air. Inhaled in this proportion night-sweats cease, apical dulness disappears, the appetite improves, colliquative diarrhœa is relieved, and sleep produced. All authors agree that the nitrogen has some soporific and sedative effect.

The physiological effects of inhaling air containing an excess of nitrogen at ordinary barometric pressure have been studied by Legallois, who shows that less oxygen is absorbed and less carbonic acid exhaled, a lowering of respiratory function occurring. But, besides this, there seems to be a specific sedative effect produced by the nitrogen. It is to be recommended, therefore, in inflammatory lung troubles, especially in early phthisis.

THE PATHOLOGICAL ANATOMY AND TREATMENT OF SPINA BIFIDA.

THE pathology and treatment of spina bifida are subjects still involved in some uncertainty, and the physician who is called to treat a case always feels that he must exercise the greatest judgment and circumspection. Spina bifida is a rare condition, fortunately, yet mortality rates show that in all probability about one child in every fifteen hundred is born with such defect. An interesting report upon the subject has recently been made by a committee of the London Clinical Society, Mr. R. W. Parker, being chairman. This committee made a special study of the numerous specimens illustrating spina bifida in the Museum of the College of Surgeons.

As regards the pathological anatomy their conclusions were that spina bifida presents three different forms. The first and most frequent is that in which there is a protrusion of the spinal meninges together with the spinal cord and its appertaining nerves (meningo-myelocele); in the second form, which stands also second in frequency, there is a protrusion of the membranes only (simple meningocele); in the last and rarest form there is a protrusion of the membranes together with the spinal cord, the central canal of which is dilated so as to form the sac cavity, the innermost lining being constituted by the expanded and atrophied substance of the cord (syringo-myelocele). A careful dissection is often necessary to distinguish between a simple meningocele and a syringo-myelocele. The committee make the important statement that in the ordinary form of spina bifida (meningo-myelocele) the spinal cord traverses the wall of the sac unchanged, giving off its nerves regularly as it lies in the sac wall. The descriptions of pathological anatomy which imply that the nerves are sent into the sac from an intraspinal portion of the cord are therefore incorrect. The central canal of the cord also, in these cases, continues on through the cord as it runs in the sac wall, and is not unclosed or dilated as has been sometimes asserted.

The theory which best explains the pathological anatomy of spina bifida is that which assumes a primary defect of development of the mesoblast, from which the structures closing in the vertebral furrow are developed. Spina bifida, is not, therefore, primarily a neural defect.

The question of the proper treatment of spina bifida is sometimes a very difficult, and is always a sufficiently unpromising one. In 1882 there were 649 deaths from this condition in England and Wales, 612 of these occurring in infants under one year of age Undoubtedly this represents the majority of all the cases occurring during that year. Every mode of treatment has secured some successes, but perhaps, up till lately at least, expectant and symptomatic measures have been best. In 1881 Dr. James Morton reported a series of 27 cases, in which he claimed to have obtained 21 cures out of the total operated upon. His method of treatment consisted in injecting, at intervals of seven to ten days, half a drachm of a solution made by dissolving ten grains of iodine and thirty of iodide of potassium in an ounce of glycerine. The committee of the Clinical Society reported that their collected tables showed a percentage of successes by Morton's treatment of from fifty to sixty. The higher mortality (of forty to fifty per cent.) was due to the fact that the method was adopted in unsuitable cases. Despite it, the committee advocated the plan of treatment by injection, and against that by excision or ligature.

REGULATING MEDICAL PRACTICE IN PENNSYLVANIA.

THE Report of the Committee on Regulating the Practice of Medicine, of which Dr. Traill Green is Chairman, was made to the Pennsylvania State Medical So-

ciety, and after some debate was adopted by a large majority.

The report is an admirable and judicious presentation of the subject, and deserves the attention of all interested in promoting the standing of the profession. The two main points made were these: first, that laws regulating the practice of medicine, by compelling registration, are ineffectual, so long as "the diploma of any legally chartered medical college is made the only requirement for registration; second, that the power of license to practise medicine should be taken from the colleges and be vested in a single State Board."

The present registration law of Pennsylvania is not a satisfactory one, nor do any of the registration laws, as yet, do all that can be expected from wise legislation.

The Committee of the Pennsylvania Society is empowered to draw up a bill which will embody the views above presented. This bill, after approval by the Society, will be brought before the Legislature. We trust that Pennsylvania will be more successful than New York has been in piloting between the Scylla of quackery and the "pathies," and the Charybdis of the medical colleges.

AN EASILY KILLED BACILLUS.

Dr. Robert Koch has shown that the cholera bacillus is rather a tender plant, and can be destroyed without any great difficulty. Drs. Nicati and Rietsch have more recently (*Rev. d'Hygiene*, May 20) contributed further facts of importance regarding this subject. These observers found, first of all, that the bacillus lives in the human body on the average only six days from the date of the attack. After this period the individual contains no specific germs, and is not a contagion bearer. In some cases the bacilli were gone in four days; in two cases a few were found on the eleventh day.

As Koch showed, the cholera bacilli are killed after twenty-four or thirty-six hours by the bacteria putrefaction. They are also killed by drying, by heat to 140° F., and by many alkalies and acids. In moist earth the bacillus lives from fourteen to sixteen days; in distilled water, twenty days; in sea-water, sixty-four to eighty-one days; in bilge-water of an iron ship, thirty-two days.

It appears that under the most favorable conditions the comma bacillus dies easily, and we can hardly understand how its delicate constitution survives a European winter, as it undoubtedly does.

Asylum Tragedies.—News comes from Marseilles of a sad occurrence in the Saint Pierre Lunatic Asylum. A keeper put two patients each in a separate bath, left them, and went to breakfast. One of the lunatics got out of his bath, during the absence of the keeper, and turned on the tap of hot water into the bath of the other. When the keeper returned he found that the unhappy creature had been scalded to death. In the Asylum at Sébon, near Dinau, a lunatic suddenly assaulted one of the attendants, another attendant who started to the rescue was attacked by a second lunatic. Both the attendants were knocked down and one mortally wounded. The two homicides then started for the central building with the intention of killing the superintendent. They were, however, captured and secured.

News of the Week.

Blonde Hair and Exophthalmic Goitre.—Dr. A. D. Rockwell writes in regard to the relation of exophthalmic goitre and auburn hair that "my own experience leads me to believe that Dr. Neal's cases were coincidences. Out of more than twenty exophthalmic patients that I have seen and treated, only a small minority had auburn hair. Black and brown greatly predominated."

Prevention of Cholera.—The City Council of Chicago has taken an important step toward insuring the perfect sanitation of the city by allowing the Health Department a special fund of $100,000. Of this amount $12,000 is to be expended toward increasing the force of inspectors, by which 50,000 houses will be inspected by September 1st. The sum of $40,000 will go toward the cleaning of alleys, and the remainder will be held for an emergency fund.

Dr. W. G. Bullock, of Savannah, Ga., born in 1811, a graduate of Yale College and of the University of Pennsylvania, Class of '33, is dead. He was frequently President of the Georgia Medical Association, and was corresponding member of many medical bodies.

Dr. Noël Gueneau de Mussy, whose death occurred in Paris recently, was well known as a physician and a contributor to medical literature. He married an English lady and frequently visited England, where he was well known and greatly liked by his medical confrères.

Professor Gerhardt, of Würzburg, has been placed first in the list of names of candidates for the Chair of Medicine in Berlin University, as successor to the late Prof. Frerichs.

Over-study and the Teeth.—The latest fad among Parisian physicians who are worried about the over-education of children is that it causes a deterioration of the teeth.

Vivisection in England.—The usual annual reports showing the number of experiments performed on living animals in Great Britain and Ireland during the year 1884 have been issued. Out of a total of 454 experiments, 170 were merely inoculations; of these inoculations, 24 were performed for the purpose of medico-legal inquiries, and involved the death of three frogs and six mice by strychnine; in 10 other cases the experiments were made in order to infect fish with a species of fungus very fatal in certain streams, and five experiments led to the death of about thirty minnows and sticklebacks, which died when placed in distilled water. In 47 other experiments, in which the animal operated on was allowed to recover from the effects of the anæsthetic, the animals subsequently suffered from partial paralysis unattended by actual pain. In 220 other cases the animal was not allowed to recover consciousness.

An Interesting Debate.—At the annual meeting of the British Medical Association at Cardiff this year, in connection with the Section of Pharmacology and Therapeutics, there will be a special debate on Anæsthetics, in which Dr. Dujardin-Beaumetz (Paris), Professor John Chiene (Edinburgh), Dr. Dudley Buxton, Mr. Wood-

house Braine, Mr. Bailey, Mr. Marcus Gunn, and others, will take part. There will be an exhibition of apparatus, and Dr. Buxton and Dr. Stockman (Edinburgh) will illustrate the action of the various drugs on the frog's heart. The subject of local anæsthesia will be discussed, and Dr. Karl Koller (Vienna), the introducer of cocaine, has promised to attend.—*British Medical Journal.*

A Medical School at Oxford at Last.—Our English exchanges are congratulating themselves on the fact that steps are now in progress which will restore the medical faculty at Oxford, arrange the classes necessary for the first two years of medical and scientific subjects in the curriculum, and provide reasonable regulations for examination for the titles of M.B. and M.D.

The Acquittal of Lucille Yseult Dudley for homicidal assault upon Rossa furnishes an exquisite illustration of the workings of our lunacy law. The woman is epileptic and has had several attacks of mania. She evidently does not possess a healthy mind, nevertheless it was unquestionably shown that at the time of her shooting Rossa she knew very well the "nature and consequences of her act." It was not done in an outburst of maniacal rage or epileptic frenzy. According to law, therefore, she should have been convicted. Nevertheless the jury saw deeper than the letter, and unconsciously assumed the medical position that the act was tainted with insanity, and was the offspring of a diseased brain.

New York Polyclinic.—Dr. M. Allen Starr has been made a Professor of Diseases of the Mind and Nervous System in the New York Polyclinic.

A Possible Explanation of Ferrán's Cholera Inoculations.—A recent cable report to the *Herald* gives the following statistics of Ferrán's work at Alcira: "The population of Alcira is 20,000 or 22,000. Of these the correspondent finds 9,100 inoculated, 7,500 of whom were reinoculated. Rich and poor and the middle class have all submitted to be vaccinated. Altogether 320 cases of cholera have been recorded at Alcira. Of these 130 died and 138 recovered, while 52 are under treatment. The deaths of non-inoculated persons were 120, against 7 inoculated and 3 reinoculated. Of the inoculated and reinoculated 20 had the disease and were cured." Thus in the half of the population which was inoculated the number of cholera cases was 30, and of deaths 10, against 290 cases, with 120 deaths, among the non-inoculated. Assuming these figures to be approximately correct, we may take the smaller percentage of cases and deaths among the inoculated to represent the prophylactic effect of a feeling of security caused by the operation. In other words, inoculation may be interpreted as a kind of faith-preventive. A factor of importance, also, is probably the inoculation of the more intelligent and careful. Altogether, we can see, as yet, nothing in the least demonstrative in the results of Ferrán's inoculations.

The College of Surgeons.—The younger members of the Royal College of Surgeons are clamoring for a reform in that august body, but the members of the Council, at least the majority of them, are obdurate, and do not see the necessity of a change. Nearly seventeen thousand of the twenty-five thousand medical men in the "Register" are members of the College of Surgeons, but of fellows there are only about twelve hundred. Only fellows are eligible for election to the Council, and of them only such of fourteen years' standing as are in the actual practice of their profession as pure surgeons. There are twenty-four members of the Council, each of whom retains his seat for eight years and is eligible to a re-election. Only fellows have a vote in the election of councillors, and they must attend personally at the college to record their vote. The practical working of this rule is, of course, that only a minority of the fellows vote, usually not more than two or three hundred, or less than one-fourth of the total number. All power is vested in the Council, and the natural consequence is that they elect a large proportion of their own number to lucrative examinerships. Members have no power and no privileges. It is therefore not surprising that the fellows, and still more the members, of the college are in open rebellion against the existence of a close corporation of this sort. They have hitherto accomplished little, but are now trying to prevent the Council from obtaining a new charter.

The Meeting at Chicago of the New Orleans Committee of the American Medical Association on the International Congress.—The Committee in question, consisting of the original committee and gentlemen representing each State and Territory, the District of Columbia, Army, Navy, and Marine Hospital Service, held a meeting, June 24th and 25th, at Chicago, pursuant to call. Twenty-nine members were present out of the whole forty-five, as follows: Dr. R. Beverley Cole, of California; Dr. John V. Shoemaker, of Pennsylvania; Dr. D. A. Linthicum, of Arkansas; Dr. George A. Ketchum, of Alabama; Dr. A. Y. P. Garnett, of Washington; Dr. William E. Duncan, of Dakota; Dr. Robert Battey, of Georgia; Dr. E. P. Cook, of Illinois; Dr. F. W. Beard, of Indiana; Dr. D. W. Stormont, of Kansas; Dr. W. H. Wathen, of Kentucky; Dr. A. H. Wilson, of Massachusetts; Dr. A. R. Smart, of Michigan; Dr. N. F. Essig, of Missouri; Dr. John S. Lynch, of Maryland; Dr. George F. French, of Minnesota; Dr. William Pierson, of New Jersey; Dr. J. W. S. Gouley, of New York; Dr. E. Eliot, of New York; Dr. X. C. Scott, of Ohio; Dr. I. Minis Hays, of Pennsylvania; Dr. F. L. Simni, of Tennessee; Dr. J. W. McLaughlin, of Texas; Dr. E. F. Upham, of Virginia; Dr. Nicholas Senn, of Wisconsin; Dr. G. Baird, of West Virginia; Dr. John S. Billings, of Washington, U. S. Army; Dr. John B. Hamilton, of Washington, U. S. Marine Hospital Service.

The resignation of Dr. Austin Flint was read and accepted. Dr. J. W. S. Gouley, of New York, was appointed in his place.

Dr. Battey offered a resolution: "That it was the sense of the Committee that in the absence of members from its meeting, the vacant places should be filled, if at all, by members of the American Medical Association for the vacant States or Government departments." This, with an amendment refusing to receive proxies, was adopted.

The Committee then proceeded to ballot for permanent chairman and secretary. On the first ballot Dr. Lynch, of Baltimore, and Dr. Cole tied. Dr. Cole was elected on the third ballot by a vote of 17 to 11. Dr. Lynch was

made vice-chairman. Dr. John V. Shoemaker was then elected permanent secretary, receiving 16 ballots out of 26.

A sub-committee was then appointed to prepare a revision of the rules and preliminary organization of the Ninth International Medical Congress. The committee consisted of Dr. Scott, of Ohio; Dr. Wathen, of Kentucky; Dr. Billings, U. S. Army; Dr. Shoemaker, of Pennsylvania; Dr. Hamilton, Marine Hospital Service; Dr. Upham, of Vermont; Dr. Gouley, of New York; Dr. McLaughlin, Texas; and Dr. Linthicum, of Arkansas.

A resolution was passed that fifteen members should form a quorum at future meetings.

At the evening session Dr. X. C. Scott reported that the sub-committee had been at work, but required an extension of time. Dr. Garnett presented an opinion received from the Hon. Samuel J. Randall relative to the legal status of the present Committee. The opinion was to the effect that the Association had not exceeded its powers in the appointment of the present Committee.

At the meeting of the Committee on the next day, June 25th, the sub-committee made its report. They recommended a decrease in the number of sections from nineteen to sixteen. The following gentlemen were selected as chairmen: Histology, Prof. Stanford E. Chaille, New Orleans; Anatomy, Prof. Joseph Leidy, Philadelphia; Physiology, Prof. J. C. Dalton, New York; Pathology, Dr. Francis Delafield, New York; Practical Medicine, Dr. J. M. Da Costa, Philadelphia; Surgery, Dr. D. W. Yandell, Louisville; Gynecology, Dr. Robert Battey, Rome, Ga.; Ophthalmology, Dr. E. Williams, Cincinnati; Otology, Dr. C. J. Blake, Boston; Dermatology, Dr. W. O. Hardaway, St. Louis; Laryngology, Dr. J. N. Mackenzie, Baltimore; Public and International Hygiene, Dr. H. A. Johnson, Chicago; Collective Investigation, Nomenclature, Vital Statistics, and Climatology, Dr. N. S. Davis, Chicago; Military and Naval Surgery and Medicine, Dr. David L. Huntington, U.S.A.; Practical and Experimental Therapeutics, Dr. H. C. Wood, Philadelphia; Diseases of Children, Dr. J. Lewis Smith, New York.

By the above arrangement the sections on Dental and Oral Surgery, Nervous Diseases and Psychiatry, Obstetrics, and Medical Education and Legislation are left out. A section on Histology is established. Dr. A. Jacobi is removed from the presidency of the section on Children's Diseases. We learn that among the gentlemen removed from all official connection with the proposed Congress are: Drs. A. L. Loomis, R. F. Weir, A. Jacobi, T. Addis Emmet, C. R. Agnew, P. F. Mundé, A. H. Smith. C. S. Bull, H. Knapp, D. B. St. J. Roosa, S. Sexton, Allan McL. Hamilton, L. Johnson Ripley, Wm. H. Draper.

The Committee adjourned to meet in St. Louis the first Monday in May, 1886.

THE INTERNATIONAL MEDICAL CONGRESS AND THE MEDICAL PROFESSION OF PHILADELPHIA.—A meeting of the members of the medical profession of Philadelphia concerned in the organization of the International Medical Congress of 1887, was held at the hall of the College of Physicians, on Monday, June 29th, Dr. Alfred Stillé in the chair. Dr. David W. Yandell, of Louisville, was present by invitation.

After hearing a report of the proceedings of the new Committee, at the meeting held in Chicago last week and after considering the changes in the organization which were made, including the restriction of the scope of the membership, by which a large proportion of the profession of the country would be excluded from the Congress, the followimg preamble and resolution were unanimously adopted:

Whereas, Certain serious changes have been recently effected in the preliminary organization and rules for the International Medical Congress of 1887, it has seemed desirable for the members of the General Committee and the officers of the Sections resident in Philadelphia to meet for consultation; and

Whereas, It has appeared that these changes are inconsistent with the original plan, and detrimental to the interests of the medical profession in America, and of the International Medical Congress; therefore, be it

Resolved, That we, the undersigned, consider that our duty to the profession and to ourselves requires us to decline to hold any office whatsoever in connection with the said Congress as now proposed to be organized.

D. Hayes Agnew,	S. Weir Mitchell,
Roberts Bartholow,	William F. Norris,
John H. Brinton,	William Osler,
Charles H. Burnett,	John H. Packard.
R. A. Cleemann,	Theophilus Parvin,
J. M. Da Costa,	William Pepper,
Louis A. Duhring,	Edward T. Reichert,
William H. Ford,	Albert H. Smith,
William Goodell,	Robert Meade Smith,
Samuel W. Gross,	Alfred Stillé,
Robert P. Harris,	George Strawbridge,
I. Minis Hays,	William Thomson,
William W. Keen,	James Tyson,
Joseph Leidy,	Horatio C. Wood,

David W. Yandell.

Reviews and Notices.

A MANUAL OF THE MEDICAL BOTANY OF NORTH AMERICA. By LAURENCE JOHNSON, A.M., M.D., Lecturer on Medical Botany, Medical Department of the University of the City of New York, etc. New York: Wm. Wood & Co. 1884.

THIS volume constitutes the December number of Wood's Library for 1884. It is a work valuable alike to student and practitioner, for it contains precisely the kind of information regarding the medicinal plants of North America, that is conspicuous by its absence from most text-books and almost all college lectures on materia medica. A valuable feature of this manual is found in the abundance of well-executed drawings and colored plates. The latter reflect high credit both upon Dr. Johnson, who designed them, and the publishers who had them faithfully reproduced. The work will be of decided assistance to medical men as a manual containing reliable botanical information. It is divided into two parts, the first of which deals with the essential elements of botany, and the second being specially devoted to a consideration of the medicinal plants of North America. The author has wisely refrained from giving a detailed description of all the medicinal species found in our country. But all the important ones have received ample attention.

ANNUAL REPORT OF THE SUPERVISING SURGEON-GENERAL OF THE MARINE HOSPITAL SERVICE, for the Fiscal Year 1884.

BESIDES the regular official report the present volume contains a number of scientific and clinical communications, which give to it a permanent value.

KIRKES' HANDBOOK OF PHYSIOLOGY. By W. MORRANT BAKER, F.R.C.S., and VINCENT DORMER HARRIS, M.D. Lond. Eleventh Edition, with nearly 500 Illustrations. 2 vols. New York: William Wood & Co., 1885. Wood's Library of Standard Medical Authors.

A MANUAL OF HUMAN PHYSIOLOGY, INCLUDING HISTOLOGY AND MICROSCOPICAL ANATOMY, with Special Reference to the Requirements of Practical Medicine. By DR. L. LANDOIS. Translated from the Fourth German Edition, with Additions by WILLIAM STIRLING, M.D., Sc.D. 2 vols., 8vo. Vol. I., pp. 514. Philadelphia: P. Blakiston, Son & Co. 1885.

IT is an excellent sign of the times that so many thoroughly good text-books on physiology have of late been given to the American profession. Our students have too long been nurtured upon home works, which were both defective in method and provincial in tone. The translation into English of Hermann's and of Landois' treatises, the issuing of text-books by Foster, Martin, and Yeo; the rehabilitation of the standard works of Kirkes and Mapother, all indicate an interest in advancing physiology which cannot but react most favorably on medical practitioners.

There are now several almost equally good text-books on physiology in the market. Among the best, undoubtedly, is that of Kirkes, as enlarged and edited by Baker and Harris. Both these gentlemen have had experience in physiological teaching and writing, and their names are a guarantee that their book is brought up to the times. They have added a large number of new illustrations, besides remodelling many parts, and adding some new chapters. The present edition of Kirkes' Physiology is intended as a guide for students, "especially at an early period of their career," hence it does not deal with controvertible questions or go into minute details of purely scientific interest. For the practising physician who wishes to learn what is now accepted as established in physiology the volumes are well adapted.

There are also very good histological descriptions prefacing the physiology of the different organs. The printing and the illustrations are, with a few exceptions as to the latter, all that could be desired.

Professor Landois' large work on Physiology has already gone through several editions in a short space of time. It has also already been freely plundered from in the past few years, especially by English writers. The present translation is another tribute of a most creditable kind to its merits. Landois' Physiology is without question the best text-book on the subject of physiology that has ever been written, and fully deserves all its honors. Its aim has been to unite the scientific with the practical. The various vital phenomena of the human body are classified, analysed, and described in scientific order, and with minuteness and exactness. At the same time their bearing in medical practice is kept in view, and to each chapter is appended a brief description of the disorders which the normal mechanism is subject to.

We fear, however, that Professor Landois' work, though so complete and admirable, would utterly floor the average American medical student, whose mind is very apt at receiving impressions, but not at comprehending scientific relationships. And the present volumes, despite their practical appendices, might dismay him with their apparent eruditeness. It would be a benefit to the student ultimately, however, if he were compelled to drill over them, while the practitioner cannot but find them valuable.

Dr. Stirling has done his laborious work of translation well. He has also contributed a number of useful comments of his own, as well as increase the illustrations from one hundred and six to one hundred and seventy-six. The American publishers have done their work carefully. The type is clear—very much like that of the original—and the illustrations are also good. We trust that the book will become a familiar one to American physicians.

THE MEDICAL ANNUAL, AND PRACTITIONER'S INDEX. 1884-85. 8vo., pp. 428. Henry Kimpton, 82 High Holborn, London, W. C.

THIS annual contains a review of progress in general and medical science, notice of new inventions, facts about medical education, sanitary memoranda, a brief description of European health resorts, and statistical data regarding English medical societies, hospitals, etc.

LECTURES ON DISEASES OF THE NERVOUS SYSTEM, ESPECIALLY IN WOMEN. By S. WEIR MITCHELL, M.D. Second edition, revised and enlarged, with Five Plates. Pp. 287. Philadelphia: Lea Brothers & Co. 1885.

IN the present edition of this book the author has altered considerably some of the early lectures and has added others on the difficulties of diagnosis in hysterical diseases of joints, on the relations of hysteria to organic disease of the spine, and on hysterical disorders of the rectum. Dr. Mitchell records many facts of a character that are strange and unusual to the ordinary practitioner. All the more, his book is valuable to those who sometimes become puzzled by obscure nervous manifestations. Perhaps the author's experience is especially peculiar, in that he observes such severe manifestations of purely functional diseases among his patients. The record of a Miss B——, who showed almost every evidence of organic spinal disease including De R., but who was finally cured, is most important, as it has led to some statements that De R. may appear in hysterical paralyses. The probabilities are, however, that there was some true organic change in the nerves, if not in the cord. The various chapters in Dr. Mitchell's book have already been reviewed in these pages and need not be referred to again here.

JAHRESBERICHTE ÜBER DIE FORTSCHRITTE DER ANATOMIE UND PHYSIOLOGIE. Herausgegeben von DR. FR. HOFMANN und DR. G. SCHWALBE. Zwölfter Band. Literatur, 1883. II. Abtheilung. Physiologie. Pp. 490. Leipzig: Verlag von F. C. W. Vogel. 1885.

THE volume is a careful and critical summary of physiological and toxicological progress in 1883.

TRANSACTIONS OF THE AMERICAN GYNECOLOGICAL SOCIETY FOR THE YEAR 1884. Pp. 408. New York: D. Appleton & Co. 1885.

THIS volume is in nowise behind its predecessors in interest. Among the contributions are papers by Drs. Thomas, Mundé, Taylor, Bozeman, and Lusk, of New York. A memoir of Dr. J. Marion Sims, by Dr. Van de Warker, of Syracuse, closes the work. Among the by-laws, which, with the constitution, are printed in the introduction, we note the following terse statement: "Any Fellow who shall neither attend nor present a paper for three successive years shall, unless he offers an excuse satisfactory to the Society, be dropped from fellowship." A modification of this rule might be of service to some of our local societies.

INSOMNIA AND OTHER DISORDERS OF SLEEP. By HENRY M. LYMAN, A.M., M.D., Professor of Physiology and of Diseases of Nervous System in Rush Medical College, Physician to Presbyterian Hospital, Chicago. 16mo, pp. 173. Chicago: W. T. Keener. 1885.

WE have examined this book with interest. The author very fully discusses the nature and cause of sleep. The latter, he thinks, must be sought "in the molec-

ular structure of the brain rather than in fluctuations of the blood-current." "Sleep must be regarded as the cause rather than the consequence of the so-called cerebral anæmia which obtains during sleep." His arguments in maintenance of this view are forcible and interesting. The causes of insomnia are treated of at length. Under the head of remedies is discussed the new hypnotic paraldehyde. The author regards it as a valuable addition to our Pharmacopœia. He gives it in doses of from forty-five to one hundred and sixty grains. Sixty grains is fair dosage. The chapter on the treatment of insomnia in particular diseases contains many practical hints. Interesting discussions on dreams, somnambulism, and hypnotism close the book. We can commend its graceful diction and logical style. It is a valuable contribution to medical literature on the subject of the relations of our mental and physical natures.

INSANITY AND ALLIED NEUROSES, PRACTICAL AND CLINICAL. By GEORGE H. SAVAGE, M.D., M.R.C.P. With Nineteen Illustrations. Pp. 544. Philadelphia: Henry C. Lea's Son & Co. Clinical Manuals for Practitioners and Students.

DR. SAVAGE has not aimed so much to write a systematic manual for students, as to put on record the results of his large experience with insanity. As physician for twelve years in the Bethlem Hospital for the acute insane, London, and as a teacher at Guy's Hospital, his advantages have been exceptionally good, and his views, embodied in the treatise before us, will be consulted with great interest. Regarded as a clinical work, concisely and judiciously written, we find Dr. Savage's treatise to be a very satisafctory one. And imprimis, we must congratulate the author upon having written his work without giving a new definition of insanity; it is a remarkable evidence of literary self-control. Dr. Savage's "ideal classification" of the different forms of insanity is a rearrangement of old clinical terms. It is not adopted by the author himself, who divides insanity into a large number of clinical groups, and discusses them seriatim. Perhaps this is the most practical way, and it is certainly the easiest. We wish, however, that Dr. Savage had shown a little more courage in dealing with the question of classification, and had applied his synthetic powers and excellent judgment to the production of something better and more cohesive than "clinical groups."

The chapters on causation of insanity are particularly good, and we feel a pleasure in corroborating the conservative views that he expresses regarding the influence of heredity, education, intemperance, masturbation, etc., in producing insanity.

On taking up his different clinical groups, we find ourselves disappointed in reading the chapters on hysteria, hypochondriasis, and neurasthenia. The author seems familiar only with one phase of these complicated conditions. The chapters on general paralysis are evidently written *con amore*, and are among the best in the book. Especially good, also, are the chapters on idiocy and imbecility, and on the legal relationships of insanity and the responsibility of lunatics. There is not so full a description of the therapeutics of mental disease as could be desired

Dr. Savage writes in an attractive way, and, without making attempts at literary embellishment, he succeeds throughout in holding the attention of the reader. We trust he will have many thus to hold.

ELEMENTS OF PRACTICAL MEDICINE. By ALFRED H. CARTER, M.D. Lond. Third Edition. New York: D. Appleton & Co. 1885.

ONLY a short time has elapsed since the issue of the last edition of Carter's "Elements," a sign that this practical little volume is appreciated by medical readers. As the work has undergone no noteworthy alteration since the second edition was published, it is unnecessary to repeat here what was then said regarding its merits and shortcomings.

URINARY AND RENAL DERANGEMENTS AND CALCULOUS DISORDERS: HINTS ON DIAGNOSIS AND TREATMENT. By LIONEL S. BEALE, M.D., Fellow of the Royal Society and of the Royal College of Physicians, etc. 16mo, pp. 356. Philadelphia: P. Blakiston, Son & Co. 1885.

IN this volume Dr. Beale maintains his vigorous, interesting style which has charmed so many readers in years past. His opening remarks concerning the therapeutic use of acids and alkalies in the treatment of urinary disorders contain much timely advice. The division of the work relating to urinary deposits is complete, and contains all those facts which every-day work calls to the notice of the practitioner. A full discussion of the various theories of albuminuria is given, and a *résumé* of the treatment of kidney diseases in general. The chapter on diabetes is particularly interesting. Full directions about diet in the latter malady are inserted. Dr. Beale suggests that toasted bread may be used sparingly, as "by this process much of the starch is converted into matters which do not yield sugar when acted upon by the saliva or pancreatic fluid." He does not regard all cases of diabetic coma as due to the presence of acetone in the blood. The book will be a valuable addition to any library.

DIAGNOSIS AND SURGICAL TREATMENT OF ABDOMINAL TUMORS. By SIR SPENCER WELLS, BART. 12mo, pp. 216. Philadelphia: P. Blakiston, Son & Co. 1885.

THIS book is an embodiment of the latest ideas of the English ovariotomist. It is in many respects a new work, as its scope is wider than that of any previous works of the author. He has condensed his former writings and added thereto and given us a manual within the reach of every student of surgery. Part I. is on ovarian and allied tumors. Part II. treats of uterine and other abdominal tumors, and is brought down to the present time. It contains allusions to all that is authentic concerning the surgery of the liver, kidney, spleen, omentum, gall-bladder, stomach, and intestine. In the first part an interesting chapter is given on the subsequent history of patients who recovered from ovariotomy, as obtained from the patients themselves in reply to circulars sent them. Sir Spencer Wells is evidently watching with great interest the progress of the operative treatment of peritonitis, though he does not in this volume very fully discuss the subject. It is hardly necessary to add that his style has lost none of its clearness, and that his statements are as frank as ever. From the outset of his career he has never wavered from his original determination to give the whole truth concerning his cases of abdominal surgery. The result of this conscientiousness is seen in the commanding position he now occupies, and in the valuable records his works of the last quarter century contain. No better volume than the present could serve as an introduction to a comprehensive study of the broad subject of abdominal surgery.

AN INGENIOUS EXPEDIENT.—Recently I was called to examine a woman who has had vesico-vaginal fistula for years. The sufferer has kept herself cleanly and comfortable by using in the vagina a globular pessary made of compact sponge. The fistulous opening is near the urethral outlet; and the pessary holds the false orifice so high that the urine can be retained for hours. The patient never urinates, but evacuates the bladder every three or four hours through the agency of a catheter —an instrument she has become expert in using. The expedient might possibly be adopted in some cases where an operation for closure of the rent is not practicable. I commend the ingenuity of the woman who, unaided by even a professional suggestion, has kept herself from being offensive to herself and others.—"H.," in *Eclectic Medical Journal.*

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, April 8, 1885.

JOHN A. WYETH, M.D., PRESIDENT, IN THE CHAIR.

DR. W. P. NORTHRUP presented, in behalf of a candidate, a specimen of *cystic kidney with dilated ureter.*

DR. WESLEY M. CARPENTER described

A NEW IMBEDDING PROCESS

in microscopical work, devised by Dr. Maurice N. Miller, of New York, and consisting in the use of bayberry tallow. For a complete description of the method, see THE MEDICAL RECORD, April 18, 1885.

DR. WACKERHAGEN presented the specimen, and reported a case of

EXSECTION OF THE UPPER THIRD OF THE TIBIA IN A CHILD

two and a half years old. Josephine R——, born in Brooklyn, of German parents, fell on the pavement in May, 1884, bruising the left knee. As the injury appeared to be slight and the pain soon disappeared, the parents gave it no further attention until a month later, when it gradually became swollen, red, and painful. Poultices were then occasionally applied, but surgical attendance was not employed until September 25th, when an opening was made just below the knee-joint, and a quantity of dark-colored blood slightly mixed with pus was discharged.

After this treatment the swelling disappeared, leaving a small opening, just below the spine of the tibia, from which a small quantity of unhealthy pus was discharged daily.

October 15th.—Dr. Wackerhagen saw the child in consultation, and upon examination with a probe, discovered two sinuses—one taking a direction obliquely upward and inward toward the internal condyle of the femur, and the other extending downward and inward. Each sinus was about an inch and a half in length.

October 19th.—An operation was performed for the removal of the diseased bone. The sinuses were both found to be superficial. The opening in the head of the tibia was then enlarged, and the cancellous structure found to be soft and easily removed with a sharp spoon. While operating in an upward direction an opening was discovered leading into the knee-joint. He then determined to remove, by subperiosteal exsection, the entire head of the bone and about one-third of the shaft, which was found to be diseased.

Upon exploration of the knee-joint he found the crucial ligaments almost entirely destroyed and the intercondyloid space filled with unhealthy granulations. These were removed with the sharp curette, and the joint thoroughly irrigated with bichloride of mercury solution—1 in 2,000—a rubber drainage-tube was introduced into the joint, and the wound packed with iodoform and bichloride gauze.

There was no inflammatory reaction, and the temperature did not go above 99° F. Since the operation the child has greatly improved in health and appearance, the bone has been reproduced from the periosteum, and she can flex the leg to an angle of forty-five degrees and can extend it as in normal condition.

Bauer's hip-joint instrument has been applied for the purpose of continued extension. The shortening is not more than half an inch.

DR. WACKERHAGEN also presented a small

SEQUESTRUM REMOVED FROM THE INNER SIDE OF THE FEMUR AT HUNTER'S CANAL.

Mr. B——, aged forty-six years, U. S., first suffered from carbuncle over left shoulder-blade, February 15, 1883. It was treated by deep incisions. On April 20, 1883, he complained of swelling of the anterior surface of the left thigh, middle third, which proved to be an abscess. This was freely laid open, thoroughly irrigated with bichloride solution—1 in 2,000—large drainage-tubes introduced, and the wound packed with antiseptic gauze. In February, 1884, Dr. Wackerhagen was called to see the patient by his family physician, and found a sinus opening on the anterior surface of thigh, about its middle, and extending in a direct line to the femoral artery. From this sinus pus was discharging in small quantity, and necrosed bone was then discovered by passing a large leaden probe.

An operation was performed February 5, 1884, by cutting down upon the probe. When the femoral vessels were reached they were held aside by retractors, and the cloaca being enlarged, several pieces of sequestra were removed. The patient recovered with a perfectly useful limb.

DR. VAN GIESON asked if any hemorrhages had occurred before the operation.

DR. WACKERHAGEN answered that hemorrhage had not occurred, although the opening was directly under the artery, and if the piece of dead bone had been discharged it would have probably penetrated the blood-vessel.

DR. VAN GIESON referred to a case in which profuse hemorrhage took place as the result of a spicule of bone penetrating the artery.

DR. L. EMMETT HOLT presented a specimen of

EXTRA-CAPSULAR FRACTURE OF THE NECK OF THE FEMUR,

occurring in a woman seventy-three years of age, an inmate of the Baptist Home for the Aged, on March 16th. While stepping from one chair to another in her room, she tripped and fell to the floor, striking she knew not how. She was unable to rise without assistance. The signs presented upon examination were complete disability; slight eversion of the foot; shortening, which varied somewhat at different measurements, probably one inch; swelling and tenderness, but no marks of contusion about the hip; the trochanter carried up higher than its fellow and rather more prominent; crepitus not sought on account of the pain, which was very severe on any attempt at movement. A long side splint was applied.

On the fourth day she became suddenly unconscious, and developed an incomplete right hemiplegia. She died comatose four days afterward, and exactly one week from the receipt of the injury.

At the autopsy there were found, not to dwell minutely upon the general lesions, thrombosis of the middle cerebral artery of the left side, an atheromatous condition of all the cerebral vessels, a fatty heart, and granular kidneys. All the tissues about the left hip were filled with extravasated blood for a considerable distance in all directions. There were also some recent inflammatory products. The fracture was found to be extra-capsular, impacted, and comminuted. The line of fracture corresponded quite closely with the classical cases. It extended from the anterior superior border of the trochanter major to the base of the trochanter minor, following the anterior intertrochanteric line. Posteriorly it corresponded roughly with the posterior intertrochanteric line, the lines of fracture uniting just above the trochanter minor. The lower fragment was slightly rotated outward upon the upper, which was impacted into it. The greater part of the trochanter major was broken off as a third fragment. The bone tissue showed only moderately the usual changes found at that period of life, but the angle at which the neck joined the shaft was found by measurement, on restoring the fragments to their normal relations, to be 120°.

The comminuted character of the fracture, and especially the fact that the trochanter major was broken off, rendered it more than likely that the patient had fallen upon the trochanter when the injury was sustained.

The explanation of the rather unusual symptom of an abnormal prominence of the trochanter was apparent on examination of the specimen. The lower part of the neck was deeply impacted into the shaft, while its upper part was only slightly impacted. When removed from the body the angle of the neck with the shaft a little less than 110°.

It is an interesting question whether the unusual angle of 120° in an old lady had anything to do in causing an extra-capsular rather than an intra-capsular fracture. .

THE PRESIDENT thought it important to examine the femur on both sides in such cases, and alluded to a case already reported to the Society, that of a supposed intra-capsular fracture of the femur, in which the specimen was obtained several years after the receipt of the injury and recovery of the patient, and it presented no small amount of evidence of fracture within the capsule; but on showing it to Dr. Frank H. Hamilton, he said that it could not be admitted as proof of bony union, because the other femur was not present with which the specimen could be compared, and that the deformity might be due to the partial change in the angle of the shaft with the neck, the result of senile atrophy.

DR. R. E. VAN GIESON presented a section of the skull with several fragments of bone, the result of

A GUN-SHOT WOUND OF THE HEAD.

Mary W——, thirty-nine years of age, a widow, was admitted to St. Catherine's Hospital, Brooklyn, February 21, 1884. The patient, while delirious after an attack of typho-malarial fever, went to the cemetery where her husband was buried and shot herself twice, with a pistol of 32-calibre, near the junction of the frontal with the parietal bone on the left side of the head.

When admitted to the hospital, two wounds of the soft parts in the region mentioned were found, about one and a half inch apart; apparently a wound of entrance and exit.

On using the probe a bullet was found between the openings mentioned, imbedded in the bone. Both tables of the skull at this point were fractured and depressed; there was a small slit-like opening in the dura mater, and subsequently a hernia cerebri formed. About two months after the receipt of the injury, exfoliations of bone took place (accompany specimen), and these continued until September, 1884, when the wound was entirely healed. From this time on, the patient had frequent attacks of pain, starting from the point of injury, and running to the back of the neck. But this did not prevent her from doing her work about the wards. She was also queer at times, and very stubborn. Three weeks before death she took to her bed with acute rheumatism, and developing pericarditis, died March 19, 1885, at 3½ A.M. Autopsy same day at 11 A.M.

Body.—Well nourished, slight rigor mortis.

Head.—Meninges are thickened, congested, and there is new connective tissue at the site of the wound. In the left anterior lobe there is adhesion of brain to the dura, and the dura to the pericranium. Around this, which is the site of the gun-shot wound, the brain is in a state of yellow softening. At the junction of the frontal and parietal, on the left side, is a round hole through the skull with rounded edges, just above and to the inner side of the hole are five pieces of lead, two of which are imbedded in the bone.

Lungs.—Few old adhesions at right apex.

Heart.—Soft, recent pericardial adhesions, wall of ventricle white, and fatty throughout the entire thickness, one or two vegetations on the mitral valve.

Liver and spleen.—Normal.

Kidneys.—Markings indistinct.

Uterus.—Retroflected, and firmly bound by adhesions, ovaries adherent to pelvic wall.

Dr. Van Gieson remarked that there was a negative point of interest in the case, namely, the woman was right-handed and the injury inflicted was close to the centre of speech, and yet there were symptoms of aphasia throughout the entire case.

Dr. Van Gieson also presented

A LEG REMOVED BY AMPUTATION FOR DRY GANGRENE,

in which he had been specially interested in ascertaining, if possible, the seat of obstruction in the arteries.

Franz H——, twenty-nine years of age, a native of Bohemia, and by occupation a brewer, was admitted to his service in St. Catherine's Hospital, February 25, 1885, with the following history:

About six o'clock in the morning, while loading the elevator with half-barrels of beer, one of two barrels which had been placed on the same hook, was thrown off by a sudden jerk of the chain and struck the patient on the head and chest, knocking him to the floor; the barrel then rolled over his left leg. It was found that the patient had received the following injuries: A contusion over the left eyebrow, a loss of incisor teeth, lacerated wound of lip, fracture of a rib on the right side, and a complete forward dislocation of the left knee-joint. The condyles of the femur projected into the calf of the leg, arresting circulation and producing paralysis. The tibia was found forward, its head and the patella making a marked prominence, and just above the head of the tibia and the patella was a very deep depression. The quadriceps extensor muscles were very lax, and the tendon could be easily grasped and moved from side to side. The leg was shortened about one and a half inch, and the foot turned inward. One hour after injury the dislocation was reduced by the house surgeon. The patient being under ether, the thigh was partially flexed, extension made on the ankle, and by manipulation the bones were brought in proper relations to each other.

It was noticed after reduction, that with the leg extended, and the knee as a fixed point, the leg could be abducted, adducted, and flexed forward, showing the extensive laceration the ligaments had sustained.

Posterior and lateral splints were adjusted, and ice bags applied to the knee.

February 26th.—Circulation is still poor in the foot of the injured leg.

March 2d.—Foot looks blue, feels cold, the toes are shrivelled; there is loss of sensation below the ankle. Ordered hot applications to the foot.

March 22d.—Dry gangrene of the foot is complete, with line of demarcation above the malleoli.

March 30th.—The leg was amputated by Dr. Hesse, Visiting Surgeon, at the knee-joint, with the long anterior and short posterior flaps.

There was an abscess just below the popliteal space, surrounded by baggy tissue at the time of the amputation.

Dr. Van Gieson had injected the limb with a ten per cent. solution of gelatin colored with fuchsin, which entered the vessels well, and it seemed that the anterior tibial artery was the one mainly affected, but he did not succeed in finding the exact location of the obstruction.

Another interesting point in the case, one which was raised at the consultation, was concerning the propriety of amputation at the knee-joint.

THE PRESIDENT suspected, on account of the very free lateral motion at the ankle-joint, that it also had been injured.

DR. H. J. BOLDT presented the trachea and larynx removed from the body of a man fifty-five years of age, who had suffered from

CHRONIC LARYNGITIS

for twelve or fifteen years, and about three months ago signs of pulmonary tuberculosis developed.

The question of interest was whether the laryngitis was primary or secondary, and the specimen was referred to the Committee on Microscopy.

INTUSSUSCEPTION.

DR. J. LEWIS SMITH presented a specimen showing intussusception, with the following history: Y——,

male, aged six months, bottle-fed since the age of a few weeks, has been fretful, and has had frequent attacks of colic and indigestion, as long as he has been artificially fed. On the afternoon of March 28th, he began to vomit, and to suffer more than usual from pain, which occurred in frequent paroxysms. In the intervals he was apparently comfortable and without suffering. During the subsequent night he slept little, in consequence of the pain and vomiting, and on the following morning I first visited him. His surface at this time was cool, and he was apparently without fever. He took his food readily from the nursing bottle with apparent relish, but most of it was soon after rejected. In the intervals between the attacks of pain he was quiet, and without symptoms to indicate the severe disease which was present. As he had been an habitual sufferer from indigestion, I did not at first suspect intussusception; but as the pains seemed to me to be too severe for ordinary colic, I returned in a few hours for a more thorough examination. I was informed that, during my absence, the infant had passed a few drops of blood, without fæces, and that the vomiting and pain had not abated. This excited my suspicion of an intussusception. A large clyster of tepid water was now used. This was returned, with a considerable quantity of blood and small blood-clots, and with only two small fecal masses, which had probably, from the beginning of the intussusception, lain below the invaginated part. No tumor could be felt in the abdominal cavity.

Twenty-four hours had elapsed since the displacement had occurred; there was no marked distention or tenderness of the abdomen, and apparently no fever. Immediately the treatment was commenced which, in my hands, has been most successful. The nates were raised nearly to a perpendicular above the shoulders, the rectal-tube for the adult introduced, the anus pressed firmly against the tube, and as much tepid water as possible injected. The amount retained could not be estimated, as a considerable portion of it was forced back by the efforts of the infant. When the abdomen was distended by the water, it was firmly kneaded, the fingers following the course of the colon, so as to aid in pressing back the invaginated gut, the displacement being always from above downward. During the operation, and immediately after, the sufferer always seemed somewhat relieved, but the symptoms soon after returned. The enemata and the kneading were repeated at intervals, but the displacement remained. On the following day the temperature was 100⅘°F., the abdomen was not notably distended, the loss of flesh and strength was not great, and I proposed laparotomy as the only means of saving life. Consent was not obtained until the following day, the 31st, when Dr. Sands, who saved the life of an infant of the same age by the operation, saw the case with me. As the pulse was 146, the temperature, 103⅘°, the abdomen considerably distended, as if from peritonitis, which, however, had not occurred, and no tumor had been, and none could be, detected, it was thought expedient not to perform laparotomy. On the following night the infant died.

Autopsy.—Abdomen much distended from fecal matter above the intussusception, and water below it; no peritonitis; the invaginated mass lay in the site of the first half of the transverse colon, against the under surface of the liver, and deeply located. Its length was about three inches, and the appendix vermiformis and the ileum protruded from its lower end. The ileum occupied the site of the ascending colon.

Remarks.—With few exceptions intussusception begins with prolapse of the ileum through the ileo-cæcal orifice, so that is is surrounded and grasped by the valve, or with the inversion of the caput coli, which becoming invaginated in the ascending colon draws after it the ileum. Hence the caput coli and the terminal portion of the leum are the incarcerated part, and the ascending colon .s the external or incarcerating portion. All the parts engaged in an intussusception may pertain to the colon, as in the specimen which I presented to the Pathological Society in 1882, which was removed from the body of a child who had suffered from the displacement several weeks, and had had the tumor in the left side of the abdomen, which was pervious so as to allow daily fecal evacuations. The displacement may also occur in the course of the small intestine, but such instances are so rare that, when called to a case, we may safely assume that we are to treat an intussusception which has commenced in one of the two ways stated above.

During the last two years I have treated successfully by water enemata, employed in the manner mentioned above, three cases of what I diagnosticated intussusception, basing the diagnosis on the presence of constipation, severe pains, vomiting, bloody stools in two of the patients, and an evident tumor in one of them. It is very important for success that the physician should be called early, make a correct diagnosis, and employ the enemata perseveringly during the first day, unless the symptoms indicate that the disease is removed. Unfortunately, as I have had opportunities to observe, the patient is often treated for dysentery on account of the bloody stools, until the displacement is too great to be remedied. Purgatives, as castor-oil, given to obviate the constipation increase the intussusception. Early diagnosis and early and correct treatment by the water enemata will, I believe, cure a large proportion of cases. Professor Sands, when inspecting the specimen in the present case, made the remark that we nearly succeeded in the reduction. Probably success might have been achieved by treatment commenced twelve hours earlier.

Formerly I have employed inflation by carbonic acid gas, which can be used by inverting a siphon of carbonic acid water and attaching the tube to the arm of the bottle. I have also employed air introduced by the bulb, especially the double bulb which accompanies the ordinary atomizer, but my preference is decidedly in favor of treatment by water. In one instance I think that the air ruptured the gut, but the child had been some days sick.

The impossibility of detecting the tumor in certain cases, and the fact that it does not remain where it formed, but passes along by the tenesmus in the course of the colon, drawing after it the ileum, as shown by this case, are noteworthy particulars.

DR. W. P. NORTHRUP remarked that treatment of intussusception by means of enemas of water seemed to be the best method that could be adopted. He had been interested in seeing how readily intussuceptions found at autopsy unravelled when the rectum was attached to the hose-pipe and a moderate stream of water allowed to enter. He believed that the method of treatment by injections of water was the best that could be employed, short of an operation.

DR. L. E. HOLT referred to cases reported in the *British Medical Journal*, in which the gut had been ruptured by distention with gas and water, and the writer took the ground that when these measures did not succeed within forty-eight hours, laparotomy should be performed at once, before inflammation and adhesions had taken place.

DR. SMITH thought the condition of the gut showed that an operation on Tuesday would have been proper in his case; but of course they did not know for certainty, at that time, what the exact condition was.

DR. HOLT said, the point which he wished to make was, that changes in the gut as the result of the strangulation were liable to be so great that the operation, if performed at all, should not be delayed.

The PRESIDENT remarked that it had been his custom not to wait longer than twelve to twenty hours, even if the diagnosis was somewhat doubtful, before making an exploratory incision at least, which, if antiseptically performed, was not specially dangerous.

REPORT OF THE COMMITTEE ON MICROSCOPY.

Dr. L. Waldstein reported that the specimen of supposed *congenital umbilical hernia*, presented in behalf of a candidate at the last stated meeting, was found to be as was supposed, and that it had one point of interest, namely, there was an adhesion which extended from the cœcum to the inner side of the peritoneal covering of the sac, and not in the direction of the umbilical cord. Congenital umbilical hernia was of two kinds, (1) that which occurred in the neighborhood of the umbilicus, and (2) that due to persistence of the omphalo-mesenteric ligament or duct, which cause in this case could be excluded.

The Society then went into executive session.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, June 18, 1885.

A. Jacobi, M.D., President, in the Chair.

Dr. H. W. Mitchell read a paper entitled

OBSERVATIONS ON THE OPERATION FOR LACERATED PERINEUM, WITH DEMONSTRATIONS AND CASES.

The author of the paper regards the perineum as a wedge-shaped body interposed between the rectum and the vagina. The common sequelæ of laceration of the perineum were rectocele and cystocele, one or both. He had seen only partial closure of a laceration as the result simply of placing the woman's limbs in a proper position, and therefore regarded it as proper, when the parts are torn, to restore them as nearly as possible to their original integrity, which can be accomplished only by an operation, that may be one so simple it can be performed by any one possessing ordinary surgical skill and having an ordinary anatomical knowledge of the parts involved. Introduce the left fore-finger into the rectum—the laceration being separated widely by two assistants—trim off the ragged edges; denude the mucous membrane, with a pair of ordinary curved scissors, down to the median line and up as high as may seem desirable; approximate the denuded surfaces; introduce deep silver-wire sutures and superficial sutures; gather the twisted ends of the sutures in a bundle and wrap them with cloth; draw the urine with a catheter, and the operation is completed.

Dr. Mitchell discards the silk loop usually used to draw the silver wire through, and threads the needle directly with the wire, and he uses curved needles. He had operated in forty cases during the last fifteen months, and in each instance union by first intention took place. No antiseptics were used, except in five cases, and then carbolized water was employed. Strict cleanliness was observed. The bowels were kept confined for six days. The histories of the forty cases were read.

Dr. Post favored keeping the bowels open daily, after operation for lacerated perineum.

Dr. M. McLean thought that the silk loop was of great advantage in introducing the sutures. He also favored the straight and discarded the curved needle. He asked why the patients did not suffer pain after Dr. Mitchell's operation, as the sutures were introduced through the skin.

Dr. Baruch favored keeping the bowels open, and objected to the curved needle. He recommended the use of the silk loop. He was pleased to know that the author of the paper was among the minority who held that the perineum was not a buttress for the support of the uterus, etc., but rather that the pelvic organs were suspended.

Dr. Mitchell, in closing the discussion, said that he could not tell why the patients did not suffer pain. They suffered from slight pain in some cases, but the operation as he had performed it had been practically painless.

Dr. Joseph A. Andrews then read a paper on

CONTAGIOUS CONJUNCTIVITIS,

in which he dealt specially with the cause, prevention, and treatment. Under the head of "causative," he referred somewhat extensively to the history of the gonococcus, and gave the history of a single case in which he inoculated the conjunctival surface with the seventh generation of pure culture, with the result of producing a typical gonorrhœal ophthalmia.

With reference to the cause of *ophthalmia in the newborn*, Dr. Andrews said there was no positive proof that normal lochia ever gave rise to conjunctival blenorrhœa.

As to *granular conjunctivitis*, he had searched in vain in the tissue for the gonococcus or cocci like it; but cocci were found in the secretion from these eyes, which was undoubtedly contagious, and the secretion was capable of carrying the disease.

Concerning the prophylaxis of ophthalmia neonatorum, it consisted in the thorough and judicious cleansing of the vagina before labor, and, after birth, the eyes of the child, with a saturated solution of boracic acid, followed by dropping one drop of a two per cent. solution of nitrate of silver into the conjunctival sac. Then followed an extended presentation of the views of numerous observers with reference to the efficiency of Crede's method, and the measures best adapted to prevent the occurrence of the disease.

The treatment of purulent conjunctivitis consisted of washing away the matter and rendering the conjunctival surface antiseptic as nearly as possible. For irrigation the best solutions were a saturated solution of boracic acid or a two per cent. solution of carbolic acid.

Dr. Andrews exhibited an instrument which he had devised to aid in this part of the treatment, namely, a form of eye-speculum, but hollow, and so arranged that a fountain-syringe could be attached to it and a stream of the solution carried in to cleanse the conjunctival sac.

When the eye has been cleansed, paint the conjunctival surface with a two per cent. solution of nitrate of silver—if very much swelling is present, with a four per cent. solution, neutralize with a solution of chloride of sodium, and then cover the conjunctiva with an antiseptic dressing consisting of vaseline and boracic acid. Apply cold by means of pledgets of lint or pieces of muslin from blocks of ice. In severe cases the cornea is in special danger, and the douche must be used frequently.

Dr. Andrews had used iodoform, quinine, and bichloride of mercury, but found that they had no advantages over the boracic acid or carbolic acid solution.

After the adjournment, which was to the first Thursday in October, Dr. Dadirrian, introduced by Dr. Post, exhibited samples of

MATZOON, OR FERMENTED COW'S MILK.

Since the earlier periods in history fermented cow's milk has been used abundantly in Armenia, Persia, Turkey, Arabia, and other Eastern countries, by all classes, and in all seasons of the year. It is made in every house, and ordinary milk is not at all used as an article of diet.

In large cities, selling fermented milk is as prominent a business as selling milk and cream in this country. It is prepared mostly by women in the country, in the evening, and carried to market early the next morning in bags and pails.

There are two kinds: one is thick, sometimes like jelly or condensed milk; the other is liquid, like buttermilk or koumiss.

These two kinds, the one or the other, according to preference, are used for the following purposes:

1. As an article of diet. It is highly nutritious. It is used as commonly with bread by children as is butter and bread here. In Asia Minor, and even in Constantinople, matzoon is put upon the table in a large dish, and is eaten with bread as a kind of dessert.

2. In the Oriental countries ice cannot be obtained regularly or abundantly; nor are sugar and lemons readily obtained, and, when found, are expensive. Nor can beer be obtained; and again, soda water has not been introduced. The farmers, therefore, use matzoon when in the field, and by workingmen generally it is used to quench thirst. Travellers carry it in a bag on horseback, and when they reach water mix it with cold water, and use it both as a drink and for eating with bread.

3. It is used as an antidote for all kinds of poisoning. There is a general belief among the people that matzoon is an antidote for every poison, and therefore, when anyone gets poisoned they do not inquire as to what the poison is, but at once administer matzoon, and this practice has been adopted with benefit for many centuries.

4. It is used as a prophylactic during every epidemic. During the severe epidemics of cholera, typhus fever, etc., in Asia Minor and Constantinople, those who used much alcoholic stimulants and ate different kinds of fruit nearly all died, while those who used matzoon chiefly as a beverage and as food nearly all escaped. Probably the matzoon acted in two ways: (1) as a nutritious, easily digested diet; (2) antiseptically, as an acid killing the micro-organisms.

5. It is used as a panacea in all acute febrile diseases. In the interior of Asia Minor, where, in the space of one hundred square miles scarcely one regular doctor can be found, sick persons are treated either by their own families or by their neighbors. When, for example, one of the family gets sick with typhoid, typhus, or scarlet fever, measles, or small-pox, etc., all kinds of other food, either solid or fluid, are at once stopped; the patient is not allowed even pure water, but from beginning to end matzoon in the liquid form is administered. In this way the patient gets nourishment, abundance of water, and also medicine.

6. It is used particularly for impaired digestion and for chest troubles.

During his three years' practice in Asia Minor, and twelve years in Constantinople, including the period of the Russo-Turkish war, Dr. Dadirrian had ample opportunity, in the government hospitals and in private practice, to test the efficacy of fermented milk in these affections.

Matzoon is more savory than koumiss, although the two do not differ entirely from each other. The specimens of matzoon exhibited were prepared in his own house, and this was the first time it had been presented to the profession. Dr. Dadirrian also prepares Leben, used in Arabia mostly, and approved of by Professor W. H. Thomson.

Tobacco and Cholera.—The Anti-Tobacco Society of France offers a prize for the best essay bearing upon the question of the liability or otherwise of smokers to contract cholera. The essays must be based upon actual facts, as the object of the Society in offering the prize is stated not to be the condemnation of tobacco in the face of facts, but to ascertain the facts as they are, although the anti-tobacconists would doubtless not be displeased to find themselves supported in their hobby by statistics. Possibly, if a healthy stomach be a safeguard against cholera, excessive smoking may dispose to the disease by disordering digestion.

A Chromatic Diagnosis of Leprosy.—In the purchase of slaves in China, it is said, great care is taken to see that they are perfectly sound, and especially that they are free from the taint of leprosy. For this reason they are usually taken on trial for a month. In examining for leprosy the slave is taken into a dark room, and a blue flame is then passed before the face. If the skin assume a greenish hue, the master is satisfied, but if there be a red reflection from the face the presence of the dread disease is suspected and the slave is returned.

Correspondence.

OUR LONDON LETTER.

(From our Special Correspondent.)

PROFESSOR WOOD'S LECTURES AT THE COLLEGE OF SURGEONS—THE LAST MEETING OF THE MEDICAL AND CHIRURGICAL SOCIETY—MR. SUTTON ON THE ORIGIN OF FATTY TUMORS—MR. HUTCHINSON'S CASE OF LYMPHO-SARCOMA OF THE TONGUE—THE PEEL-GROVE BURIAL-GROUND CASE—THE HOLLOWAY SANITARIUM.

London, June 13, 1885.

As Hunterian Professor of Surgery and Pathology, Mr. John Wood, F.R.S., Surgeon to Kings College Hospital, is now delivering a short course of three lectures at the College of Surgeons, on "Hernia and its Radical Cure." Mr. Wood's views may, perhaps, not be generally acquiesced in by all surgeons, but they cannot fail to, at any rate, command respect. The subject is one which Mr. Wood has made peculiarly his own, having been engaged in its study during the last twenty-four years, that being the period which has elapsed since Mr. Wood gained the Jacksonian prize, at the College of Surgeons, for an essay containing his (then new) method of operating for the radical cure of hernia. Until within the last few years this has been the operation mainly practised by English surgeons. Mr. Wood dwelt at some length, in his opening lecture, on the "Pathology and Causes of Inguinal Hernia." He remarked that while disproportionate development in the intestines and abdominal viscera may predispose to, and assist in the formation of, a rupture, the chief causes "lie in the imperfection of the structures from delayed evolution in and about the deep hernial apertures." Speaking of the omentum, the lecturer said that, if it is elongated and so formed as to easily slip into a hernial sac and keep it open, or pressing upon the deeper hernial openings, an operation for radical cure cannot really be effective unless a portion of the omentum be also removed at the same time. "Such removal of the omentum," said Mr. Wood, "I have, in my later operations, always effected when required. Any attempt at shortening of the mesentery seems so far, even in these days of daring abdominal enterprises, to be out of the scope of practical surgery."

Mr. Wood dwelt at considerable length on the anatomy and mode of formation of inguinal herniæ. A few practical remarks were made on exercise in relation to hernia. Among exercises favorable to the prevention and cure of herina he placed hanging and swinging by the hands upon a trapeze, climbing up a pole or rope-ladder with the hands, and generally "any motion or posture which stretches out the body and increases the tension of Poupart's ligament." But force applied with the legs bent on the body and the inguinal structures relaxed, is injurious, remarked Mr. Wood. Rowing, lifting heavy weights, and straining with the diaphragm were mentioned as injurious, and tricycling received his unqualified disapproval. In all these, he said, Poupart's ligament and the adjoining structures were relaxed. The transversalis muscles forced the viscera down upon the relaxed structures in the groin, causing them to give way, and thus a rupture was produced. The rectus, also, in contracting pressed backward its sheath and the conjoined tendon and so tended to open up the canal.

The Medical and Chirurgical Society closed its labors for the present session on Tuesday last. Two papers were then read. One of these was by Mr. J. B. Sutton, and was virtually a pathological essay, being an elaborate disquisition on the origin of fatty tumors. Mr. Sutton's theory is that any of the soft tissues of the body, normal or pathological, may degenerate into fat, and that, in some cases, this retrograded tissue assumes an autonomy and grows into a veritable fatty tumor. This theory Mr. Sutton elaborated with a good deal of ingenuity and

learning. He referred to cases which lent support to the notion that congenital fatty tumors containing bone are really examples of parasitic fœtuses whose soft parts have retrograded wholly or partially into fat. In the ensuing discussion Mr. Sutton remarked that a parasitic fœtus may remain attached as long as thirty years and even then move its limbs, thus showing that it is certainly a rudimentary fœtus enjoying life.

The other paper was by Mr. Hutchinson, and described very fully the history of a case in which a large lympho-sarcomatous tumor was removed from the tongue by Mr. Hutchinson. The growth began in early life in the substance of the tongue, and ultimately attained such a size as to fill the mouth. Its growth had been slow and painless. It was of stony hardness, its surface covered at one part with papillary outgrowths, but there was no tendency to ulceration. There was no gland-disease. When the patient (a medical student) was twenty-two years of age it was removed on account of its bulk, the patient being otherwise in good health. When removed it was found to weigh seven ounces, having been at least twelve years in growing. After two years immunity, a new growth suddenly developed in the scar, increased very rapidly, and caused the death of the patient.

The case of the "Peel-Grove Burial-ground," has been before the law courts again during the last few days. The plaintiff sued the defendant for rent, the land having been let for building purposes. Since the ground was let, an Act of Parliament has passed forbidding building on any disused burial-ground. On this ground the claim was resisted. I will not weary your readers with a discussion of the legal questions brought forward, but will briefly draw attention to a few points of sanitary interest. The first interment took place in 1840, and the burial-ground was closed in 1855. Its total area was less than three-fourths of an acre. The chaplain, who officiated from 1844 to 1855, gave evidence that he had officiated at the burial of 11,300 persons. The total number buried, he estimated to be between seventeen and eighteen thousand. The graves were from twenty to twenty-five feet deep. Each grave contained the bodies of ten or twelve adults and double as many children. There was no space between the coffins. The neighborhood is now densely populated. I am glad to say the judge disallowed the claim, remarking that the whole proceeding was an unholy compact.

On Monday next the Prince of Wales is to open the "Holloway" Asylum, at Virginia Water, designed for the care and treatment of the mentally afflicted of the middle classes. The institution is a handsome building of red brick and stone, and has been erected with a large legacy bequeathed for that purpose by "Professor" Holloway, of pills and ointment fame. A duly qualified medical superintendent has been appointed.

OUR PARIS LETTER.

(From our Special Correspondent.)

CALORIFICATION—TRANSPLANTING AN EYE—CHOLERA—THE TREATMENT OF PROGRESSIVE MYOPIA—DEATH OF DR. NOËL GUENEAU DE MUSSY.

PARIS, June 12, 1885.

In pursuing his researches on the temperature of the human body, Dr. Charles Richet lately communicated a note to the Academy of Sciences on the influence of the nervous system on the process of "calorification," or generation of heat in the organism. His new experiments have proved that the nervous system is the regulator of animal heat, it is more by an action on chemical life than by an influence of the vasomotor system. In fever one loses more heat than in the normal condition; in the state of algidity one loses less heat than in the normal, so that the temperature, in these two conditions is in constant relation with the production of heat. Hence the changes in the production of heat, at least in animals provided with a thick fur, have more importance in determining the general temperature of the body than the changes caused by loss of heat.

The operation of skin-grafting was justly considered a great achievement in surgery, but up till now the grafting of entire organs, except perhaps teeth, and that with those of animals completely dissimilar in their nature has not to my knowledge been heard of. Dr. Chibret, of Clermont-Ferrand, lately astonished the Paris Academy of Medicine with a note, announcing that he had replaced the eye of a young girl, which he had to remove to prevent sympathetic ophthalmia of the other, with that of a rabbit. A fortnight after the operation, when Dr. Chibret forwarded his communication, matters seem to have been in the most satisfactory condition, that is as far as the fixing of the eye is concerned, but no mention is made as to whether the patient can see with the eye or not. But for the high standing of the author in the profession, who is a distinguished ophthalmologist, the whole affair might have been considered a joke, but as he promised to give full details of the case at an early opportunity, we must suspend further comments on the subject.

After having ascertained that the epidemic now raging in the province of Valencia is the genuine Asiatic cholera, and after having hesitated to put into practice Dr. Ferrán's method of cholerization, the Spanish Government has organized a special commission to report on it, after having personally observed the effects of the inoculations practised by Dr. Ferrán with the microbes cultivated from the dejections of choleraic patients. The experiments were to be performed on persons and animals. Children were to be inoculated with the consent of their parents, whilst adults were to receive instructions direct from Dr. Ferrán. The persons inoculated were to be taken from divers classes of society, and the report of the Commission is to be forwarded to the Faculty of Medicine of Madrid for its opinion and for ultimate publication.

The report of the outbreak of cholera at Marseilles has been officially contradicted. Nevertheless, every precautionary measure is being taken to prevent an incursion of the plague.

In a memoir addressed by Dr. Dransart to the Academy of Sciences on the treatment of progressive myopia by iridectomy and sclerotomy, the author, supported by numerous observations, considers that, as these operations have effected a revolution in the treatment of glaucomatous affections, the same operations would be still more efficacious to combat progressive myopia, which in his opinion contributes largely to the number of cases of blindness noticed each year. The following are the conclusions of the memoir: 1, the circulatory theory which explains the production of glaucoma is also that which explains the genesis of myopia; 2, it is expedient to practise sclerotomy or iridectomy in the cases of progressive myopia, in which the visual acuity is reduced to one-fourth, and even to less, and in which the progress of the malady had not been arrested by the ordinary therapeutic means; 3, these operations arrest the progress of the disease, maintain visual acuity, which may be even doubled, or even restored, in certain cases, when it has disappeared altogether, either qualitatively or quantitatively; 4, iridectomy should be almost always performed as a preventive of detachment of the retina, and in this way suppress the principal factor of cecity by myopia.

At the meeting of the Academy of Medicine last week the President announced the death of Dr. Noël Gueneau de Mussy, which had just taken place, and to which he referred in the most touching terms. By this death the medical profession of Paris has lost one of its most eminent members. Gueneau de Mussy was born on November 6, 1813, and was the grandson of the celebrated Professor Hallé. Besides being a distinguished physician, he was a man of letters. After having taken his degree in 1839 he was chosen by Chomal as his Chef de Clinique. In 1847 he was promoted to Ayrégé, and in

1867 he was elected member of the Academy of Medicine. He was for a long time Physician to the Hôtel Dieu, which post he held till within a few years ago, when he was obliged to retire, owing to his having reached the limit of age (sixty-six) allotted to hospital physicians. He was, however, retained as consulting physician, and his vast experience and great diagnostic powers were taken advantage of whenever opportunity offered. He was well versed in the English language, which enabled him to introduce into French medical literature the theories and experience of the great English and American authors. He had just completed the fourth volume of his "Clinique Médicale," which treats of cases observed by him in his hospital and private practice. The third volume of this work was devoted exclusively to typhoid fever, and may be considered almost a reproduction of the works of Dr. Murchison and of other British authors on the subject, at least in so far as is concerned the etiology of the disease.

ON RUPTURE OF THE PERINEUM.[1]

To The Editor of The Medical Record.

Sir: Will you please publish in The Record my supplementary remarks on Rupture of the Perineum, made after the reading of the paper. They were substantially as follows:

Gentlemen: As I cannot remain until the discussion of the several papers to be read this evening is closed, the President has permitted me to make a few supplementary remarks.

Speaking of the means to be employed to prevent a rupture of the perineum, Dr. Barker, in his excellent treatise on "Puerperal Diseases," says that, to avert this accident, he has often, near the close of labor, pushed the chloroform to the production of *profound* anæsthesia, with the result of relaxing the muscular fibres of the perineum and without delaying the progress of labor.

I regard this as an error in theory and of observation. I do not think the muscular fibres of the sphincter vaginæ ever offer any resistance to the advance of the head at this stage of labor. They have been stretched beyond their normal length four or five times at least, and in this condition they must have lost all contractile power. Certainly, while the distending force is continued no degree of anæsthesia could cause these fibres to relax. It might diminish the force of the uterine contraction and thus relieve the perineum, but when the contractions returned the perineum would be subjected again to the same strain. Dr. Barker intimates, however, that the uterine contractions are under these circumstances in no way affected. To my mind his theory is incredible, and his observations are therefore erroneous.

I wish further to call your attention to some remarks of Dr. Meigs, the late Professor of Midwifery in the Jefferson Medical College, Philadelphia, who enjoyed a very large obstetrical practice for many years, which will show how seldom in his personal experience a perineal rent demanding operative interference occurred. "I defy," he says, "any one to point out the sample of a female who has suffered under any durable lesion, etc., who has been attended by me." He objects also to the primary operation as worse than useless.

Such testimony as this as to a matter of fact—and it corresponds with my own personal experience—cannot properly be ignored, no matter how old the testimony may be.

And last, I wish to call your attention to the letter of the Vienna correspondent of The Medical Record. In the number of that journal for June 13, 1885, he states that in the Vienna Obstetrical Hospital there are confined every year about nine thousand patients. The building has been used for this purpose the last hundred years. Antiseptic precautions are enjoined, but some of the most important precautions do not receive practically the slightest attention. During the three months preceding his report seven hundred women were delivered, and only three died, one of which number was a Cæsarean section, and this was the only septic case. The average mortality of the hospital is placed at less than one-half of one per cent.

Speaking of the general management of labor in this hospital, the writer says: "The entire absence of medicine to hasten the labor when too slow, or relieve severe pains, or to induce them when wanting or feeble, is noticeable. Avoidance of *any kind of interference* in labor is carried to the greatest extreme. Even for forceps operation or a version, unless extremely difficult, no anæsthetic is administered. Great care is taken also to prevent the least injury to the os uteri. The utmost respect is paid during labor to this part. It must dilate normally and in its own time. Artificial dilatation is not permitted, even with the finger, and all mechanical appliances for dilatation are 'inventions of the devil.' The placenta is usually expelled by Crede's method."

"Rupture of the perineum in one case in a hundred of primiparæ is a rarity;" but when it does occur it is at once closed by silk sutures. Upon this latter point alone my opinions are not in accordance with the opinions and practice of the Vienna surgeons, and this is a point of relatively small importance.

Frank H. Hamilton, M.D.

[1] Supplement to Dr. F. H. Hamilton's paper, read before the New York County Medical Association, June 15, 1885, and published in this Journal, June 20, 1885.

MEDICAL MANNERS.

To the Editor of The Medical Record.

Sir: Your ingenious fellow-countryman, Mark Twain, tells us, in a foot-note to his "Answers to Correspondents," that the advice given to the "Young Poet" was taken *au grand sérieux* by the *Saturday Review*, which seized the occasion to hold up to British scorn the invincible ignorance of American editors. We have all been rather pleased to think that the omniscient *Saturday Review* should have been caught tripping, but it seems that what is very obviously a joke on this side of the Atlantic may be regarded as solid material for a serious article in the New York Medical Record, and may actually afford a basis for congratulation "to the profession in this country" (*i.e.* America) that you are "not so dependent upon manners" as your brethren in England.

I can assure you that the letter from a practitioner of "fifty-one years' standing" was undoubtedly a *jeu d'esprit*. Another time he ought to be careful and write himself a practitioner of "a hundred and fifty-one years' standing," and then there would be no mistake of this kind. You evidently have not noticed that the *Medical Times* has been making vigorous efforts to take rank as a serio-comic paper. Its efforts so far have been heavy, but they are none the less exceedingly well meant.

Manners here, as elsewhere, are based mainly on good sense and good taste, self-control, self-respect, and respect for other people. These are qualities which I hope are cultivated and regarded with equal favor on both sides of the Atlantic, as they certainly form a most important element of success in the stock in trade of any young physician.

I am, yours obediently,

Robert Saundby, M.D.

Birmingham, Eng., March 4, 1885.

Infant Mortality in Russia.—More than sixty per cent. of the children in Russia die under the age of five years, about two millions of them perishing every year. Not one-half of the males attain to the age of thirty-five, and one-third of those who survive this age are incapacitated for military service by reason of their low stature or of constitutional debility.

Army News.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from June 21, 1885, to June 27, 1885.

HARTSUFF, ALBERT, Major and Surgeon. Assigned to duty at Fort Hamilton, N. Y. H. S. O. 133, Department of the East, June 24, 1885.

MIDDLETON, J. V. D., Major and Surgeon. Granted one month's leave, with permission to apply for fifteen days' extension; to take effect about 15th prox. S. O. 88, Department of the Missouri, June 19, 1885.

BROWN, H. E., Major and Surgeon. Assigned to duty as Post Surgeon, Fort Reno, Ind. T. S. O. 91, Department of the Missouri, June 24, 1885.

TAYLOR, BLAIR D., Captain and Assistant Surgeon. Ordered from Department of Texas to Department of the East. S. O. 141, A. G. O., June 20, 1885.

CARTER, WILLIAM F., Captain and Assistant Surgeon. Ordered from Department of the East to Department of Texas. S. O. 141, A. G. O., June 20, 1885.

DAVIS, WILLIAM B., Captain and Assistant Surgeon. Leave of absence extended three months. S. O. 142, A. G. O., June 23, 1885.

EBERT, R. G., First Lieutenant and Assistant Surgeon. Granted leave of absence for one month, to take effect about July 5. S. O. 97, Department of Colorado, June 17, 1885.

ROBERTSON, R. L., First Lieutenant and Assistant Surgeon, now on leave of absence, directed to report in person by July 7, 1885, to Commanding Officer of Columbus Barracks, Ohio, to accompany detachment of recruits to Department of Texas. On completion of this duty to rejoin his proper station. S. O. 143, A. G. O., June 24, 1885.

Medical Items.

CONTAGIOUS DISEASES—WEEKLY STATEMENT.—Report of cases and deaths from contagious diseases reported to the Sanitary Bureau, Health Department, for the week ending June 27, 1885:

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-spinal Meningitis.	Measles.	Diphtheria.	Small-pox.	Yellow Fever.
Cases.								
June 20, 1885	0	11	51	3	88	54	0	0
June 27, 1885	0	12	46	1	109	70	0	0
Deaths.								
June 20, 1885	0	1	7	2	17	23	0	0
June 27, 1885	0	3	9	1	21	34	0	0

THE HEALTH OF BARCELONA.—We have received from Señor Bolibar, the editor of *Industria e Invenciones*, a pamphlet of nearly one hundred pages, treating of the sanitary condition of Barcelona, and of the means necessary to improve it. The author, Señor García Fária, is thoroughly impressed with the necessity of instituting sanitary reforms in his native city, and has performed his laborious task with a zeal worthy of his object. The work is accompanied with thirty-seven statistical tables, showing the comparative death-rates in all the principal cities of Europe and America, their mean temperature, their elevation above the sea, their sanitary condition, etc., compiled with great care from official sources. The necessity of the work is shown by the fact that the death-rate of Barcelona is 32.5 per one thousand, while that of London is but 19. Over fifty per cent. of the deaths are of persons under thirty years of age, and forty per cent. are from infectious diseases. This high death-rate is not chargeable to the unfavorable situation of Barcelona, but, as the author points out, to insufficient sewerage, poor water-supply, and defective pavements. On account of its tables this monograph will be very serviceable to many who take no particular interest in the sanitation of Barcelona apart from that of other cities.

VASELINE IN PASTRY.—A French sanitary committee has recently reported adversely against the practice of certain bakers of using vaseline instead of butter in pastry. The chairman in his report said that cakes made with vaseline did not become sour, but that this was a disadvantage for the consumer, as he was thus more liable to be deceived as to the freshness of his purchases. Vaseline furthermore was deficient in the nutritive properties possessed by butter and lard, and data were wanting to prove that it was not even injurious to the organism.

A NEW BRAZILIAN JOURNAL.—The first number has appeared of the *Revista dos Cursos Praticose Theoricos da Faculdade do Medicina do Rio de Janeiro.* The editors are Drs. Cypriano de Freitas, Hilario de Gonvèa, Erico Coelho, Martin Costa, and Lima e Castro. It is the official organ of the medical faculty of Rio de Janeiro, and, as it is published at the expense of the government, it may well anticipate a life as long as its name. And, indeed, if the subsequent numbers equal in excellence the first, the longevity which we wish it will be deserved.

THE SUGAR OF THE BLOOD.—According to Dr. J. Seegen (*Annales de la Société Médico-Chirurgicale de Liège*) the sugar contained in the blood is glucose. It is found in large quanties in the liver, and is decomposed in the organism, but it is only slightly, if at all, diminished in amount in its passage through the lungs. The blood of the carotid artery contains about the same proportion as does that of the right ventricle, but the blood of the hepatic veins is charged with double the quantity that is found in the portal vein. The total mass of the blood in dogs contains from one to one and a half parts per thousand of glucose.

A NOVEL THEORY CONCERNING THE PREVENTION OF CHOLERA.—Lyons is said to have hitherto enjoyed a singular immunity from cholera. Numerous theories have been advanced to account for this, but certainly one of the most original, if not the most satisfactory, was that invented many years ago by M. Levicaire, of Toulon, and recalled by the *Lyon Médical* of a recent date. This eminent physician regarded cholera as a poisoning by hydrocyanic acid. The alleys in Lyons, it seems, are used by the male population as public urinals, much as they were formerly in Cincinnati and other of our Western cities. "And it is precisely because every one makes water in the alleys that Lyons enjoys a freedom from cholera, for the ammonia so produced neutralizes the hydrocyanic acid," said M. Levicaire.

ANCIENT DENTISTRY.—In the museum of Cometo, in Tuscany, von Marter recently discovered a skull containing false teeth. They seemed to have been made from the teeth of animals, and were fastened to their natural neighbors by means of narrow gold bands. The tomb from which this skull was taken, was said to date back to the fifth or sixth century before the Christian era.

ADONIDIN.—This substance is a glucoside derived from the adonis vernalis, a plant of the family of ranunculaceæ. It increases arterial tension, regulates the action of the heart, and augments the renal secretion. It is administered in daily doses of one-thirteenth to one-ninth of a grain, gradually increased to one-third or one-half a grain. It is said to possess a cumulative action and its administration should therefore be suspended every fourth or sixth day.

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Original Articles.

CASE OF POISONING RESULTING FROM CHLOROFORM TAKEN INTERNALLY—RECOVERY.

SUPPLEMENTED WITH A TABLE OF REPORTED CASES.

BY LLEWELLYN ELIOT, M.D.,

ATTENDING PHYSICIAN TO ST. ANN'S INFANT ASYLUM, CENTRAL DISPENSARY, EMERGENCY HOSPITAL, ETC., WASHINGTON, D. C.

REPORTS of cases of poisoning following the internal administration of chloroform are scattered through the literature of medicine. To collect these various reports and to show their treatment is the object of this paper. When summoned to the case which is recorded below, I was struck with the absence of information regarding treatment in text-books upon materia medica, therapeutics, and toxicology. The table accompanying is the result of an investigation into this subject, extending through two years: it shows upon its face the picture of each case, but for the use of those who may desire to extend this investigation beyond its present limits, as well as for the purposes of general information, the record of each case is appended in abstracts.

Glancing at our table we find death resulted in 16 cases; of this number but 6 died in twenty-four hours, the other 10 surviving varying periods until the eighth day. A fatal issue results from the intensity of the œsophageal, tracheal, and gastric symptoms. One case (No. 15) should properly be excluded from consideration, as it is surrounded by such an element of doubt; this would give a mortality of 15 in 56 cases, or 26.78 per cent.

Chloroformum, methenyl chloride, terchloride of formyl, according to Wood, was discovered by Mr. Samuel Guthrie, of Sackett's Harbor, N. Y., in 1831. It results from the action of bleaching powder (chloride of lime) upon methyl or ethyl alcohols, or of chlorine upon marsh gas. It is a heavy, colorless fluid, practically uninflammable, but will burn with a greenish flame; its smell is powerful and agreeable; taste hot, sweetish, and aromatic; solvent powers extensive; specific gravity 1.525 at zero and boils at 62° C. (143.6° F.); insoluble in water, soluble in alcohol and ether; unaffected by concentrated sulphuric acid. There are two officinal forms—chloroformum venale and chloroformum purificatum.

Chloroform is introduced into the system through the lungs, the stomach, and the skin. Whether its action depends upon an altered condition of the blood or upon its direct action upon the nerves is not certain; it is more than probable that both theories are correct—upon the blood by increasing its carbon and rendering it thicker, and upon the nerves by its paralyzing effect. That it acts upon the blood by destroying its red disks in the body is proven by the appearance of icterus following its administration either by inhalation or by the mouth (L. Hermann: *Archiv für Anatomie, Physiologie, etc.*, 1866).

Chloroform from its quickness of action and smallness of dose is superior for surgical and obstetrical purposes to any other anæsthetic, although it has an increased amount of danger over ether, nitrous oxide, and bromide of ethyl. Its mortality is 1 to 5,860, that of ether 1 to 16,542, that of nitrous oxide 1 to 100,000. It is not an agent to be used indiscriminately nor in the absence of proper antidotes.

Deaths are rather due to paralysis of the heart and respiratory organs. When administered internally the symptoms produced are of the same character only more intensified and more lasting than those following inhalation. A stage of transient excitement, most marked in athletes and drunkards, muscular relaxation, abolition of sensibility and consciousness, profound narcosis, stertorous breathing and abolition of reflex actions are the essential symptoms following the administration of this drug either by inhalation or by the mouth. Although rarely prescribed internally it is sometimes useful in neuralgia, colica pictonum, delirium tremens, renal calculi, ague, and to relieve the pain and vomiting of cancer of the stomach. Chloroform is administered under but three conditions, namely: first, by surgeons for surgical purposes; second, by medical men and others to induce sleep, obtain relief from pain, or for suicidal purposes, and third, for its intoxicating effects. A few cases have occurred where it has been taken by mistake for some other fluid. I have never seen its successful administration to sleeping subjects, although I have experimented upon them.

It is impossible to state with exactness the amount of chloroform that can be administered by inhalation; the concentration of the vapor and the length of time during which it is used are to be considered. In a successful case of puerperal eclampsia where I assisted there was one pound and a half administered during thirty-six hours. The same holds good in regard to the fatal dose taken by the mouth. Recorded cases show quantities varying from half a drachm to six ounces. The indications of the administration of a fatal dose, in addition to general muscular relaxation, perfect anæsthesia, and insensibility, are cyanosis, convulsions, jaundice, sudden paleness of the face and lips, stoppage of the pulse and respiration, involuntary passage of urine and fæces. In treating cases of narcosis following internal administration, the first indications are to evacuate the stomach by an emetic, or preferably by the stomach-pump. The stomach may be washed out and the restorative remedies introduced. Fresh air, sinapisms, flagellations, cold douche, strong coffee, with ammonia, strychnia, digitalin, or morphia sulphate hypodermically administered are the measures to be adopted; at the same time artificial respiration, lowering the head to the general level of the body, drawing the tongue forward, lifting the chin, application of hot irons to the skin, and the inhalations of nitrite of amyl should be employed. Electricity is advocated upon theoretical grounds. Recently subcutaneous injections of apomorphia have been suggested by Dr. Reuss (Case 41); the employment of this powerful emetic would no doubt hasten recovery if used in time, but few physicians have it always at hand. The employment of ammonia as a stimulant, in preference to alcohol, is based upon theoretical considerations, alcohol increasing the already increased amount of carbon in the blood, while ammonia acts merely as a powerful stimulant. This view was brought forward by Spence.

The post-mortem[1] appearances are not pathognomonic. The gastro-intestinal tract is reddened, ecchy-

[1] In the abstracts all post-mortem appearances not connected with the result of chloroform-poisoning are omitted.

mosed, and shows other signs of severe and intense inflammation.

The dose generally prescribed for internal administration is from fifteen drops to one drachm in mucilage, glycerine, or sweetened water.

On Sunday, January 14, 1883, about four o'clock in the evening, I was summoned to see General B——, sixty years of age, who had swallowed chloroform. Upon my arrival at the house, ten minutes after, his wife informed me that he had taken the bottle containing six ounces of Squibb's chloroform and swallowed two ounces. She had given him mustard-water and "a few drops of water of ammonia." He was lying upon the bed in an apparently exhausted condition, with sunken eyes, anxious expression, dilated pupils, coldness of the extremities, a weak pulse of 70, intense burning in throat, stomach, and over the abdomen, sighing respiration, and great inclination to sleep. He was given pulv. ipecac, zinc sulph., āā 1 gramme, to be repeated; soon violent nausea and retching set in, and the stomach was emptied of a yellowish fluid, smelling strongly of chloroform; this vomiting was repeated twice, when the fluid was streaked with blood. To combat the drowsy condition very strong coffee was given him; to allay the burning sensation plenty of sweet oil. In about two hours he was sufficiently recovered to be left with his attendants, leaving instructions to continue a systematic series of pulling and calling and administration of strong coffee. I promised to call at 8.30 the same evening, when his only discomfort was the excessive burning about the mouth and throat. The free use of sweet oil afforded relief. On the next morning he appeared very well, was ordered a gargle of chlorate of potash and slop diet. In a week he was entirely recovered.[1]

Case 1.—Adult male, aged twenty-two, took four ounces. Seen in three hours. Appeared as if intoxicated; skin below normal; pupils dilated and insensible to light; respiration tranquil; pulse 65 and small. Stomach was washed out with tepid water; then with brandy-and-water; then one gramme of compound spirits of ammonia introduced. Vomiting followed; became profoundly comatose; breathing stertorous and puffing; skin cold; pulse imperceptible; general convulsions. Placed in blankets and surrounded by warm water in tins; sinapisms to chest and large blister to nape of neck. Became sensible thirteen hours after taking the chloroform; on the fourth day he was discharged entirely cured. He stated that he lost sensibility from the time he drank the chloroform.

Case 2.—F. D. M——, aged thirty-one, took thirty grammes thirty drops. Heat and burning of air-passages, œsophagus, and stomach; in ten minutes was delirious; pupils neither dilated nor contracted, mobile; respiration unembarrassed. Given sweetened water and a few drops of aqua ammonia, without effect. Recovery. This occurred in a case of treatment of colica pictonum.

Case 3.—Wm. W——, aged twenty-seven, on December 6, 1851, took two mouthfuls. Seen in six hours. Breathing stertorous and heavy; pupils dilated; pulse 60, full and soft; total insensibility; face livid; lips almost black. Stomach washed out with warm water and mustard; turpentine over chest and abdomen, also by enema. Improvement. Death in thirty-six hours. Post-mortem examination showed congestion of mucous surface of pharynx and of the brain.

Case 4.—Male child, aged four, took from one to two drachms. Seen in thirty-five minutes. Insensibility; pupils contracted; breathing laborious; pulse quick and full; face pale; extremities cold; afterward pupils became alternately dilated and contracted; face livid and pale; pulse quick and full, then imperceptible; breathing stertorous. Treatment: Sulphate of zinc; stomach-pump; sinapisms; ammonia to nostrils; leeches; artificial respiration; then warm bath. Died in three hours. No post-mortem examination.

Case 5.—Mr. H—— was ordered for delirium tremens the following: ℞. Chloroform, 3 v.; pulv. glycyrrhiza, 3 j.; mist. camph., ℥ ixss. M. Sig.: One ounce dose. He took the whole at one dose. No bad effects followed; was jaundiced. Recovered. No notes in detail.

Case 6.—Female, aged twenty-one, on May 19, 1856, took two ounces. Seen in twenty minutes. Symptoms resembled opium poisoning; perfectly unconscious; pupils contracted; temperature normal; respiration tranquil and regular; pulse 78, soft and tolerably full. Treatment: Stomach-pump; sinapisms; aromatic spirits of ammonia with brandy. Respiration continued to decrease until it fell to two in the minute, and finally ceased for nearly two minutes. Galvanism; stimulating enemata every half hour. May 25th was able to sit up, and the following day returned to work.

Case 7.—Adult male, who took six ounces in the Royal Infirmary, Edinburgh, some years ago. He recovered from the immediate effects, but died in forty-eight hours of acute gastritis. Stimuli and galvanism were used. This case is related from memory, and the name of the medical attendant is not given.

Case 8.—H. P——, male, adult, on August 12, 1856, took three and a half ounces. Seen in a few minutes. Immediate symptoms of intoxication; vomiting violently and in a state of wild excitement; insensibility; hiccough; pulse frequent, weak, and jerking. Pupils varied, sometimes dilated at others contracted; breathing became slightly stertorous. Treatment: Stomach-pump; galvanism; cold affusions; shaking. Recovery from poisoning in nine hours. Slight gastritis followed.

Case 9.—C. C——, aged twenty-three, took four to five drachms. Seen in two hours. He immediately experienced burning in the throat, fauces, and epigastrium; in half an hour he vomited; breathing became slower; pupils contracted and then dilated to such an extent that scarcely any iris could be seen, and so remained until his recovery; surface became cold; pulse imperceptible; jaws firmly clenched; respiration but faintly perceived; blood and mucus exuded from mouth and nostrils. Treatment: Cold affusions, artificial respiration, and enema of turpentine. Recovered entirely in a few hours with no bad results except slight subacute gastritis.

Case 10.—Mary McN——, aged thirty-five, took an ounce and a half. Seen in twenty minutes. Insensible; stertorous breathing; pulse slow and feeble; pupils contracted. Treatment: Mustard sinapism; dry cups; frictions; stomach-pump, and brandy. Gastritis followed and she died in twenty hours. Autopsy showed softening of the mucous membrane of the stomach to such an extent that it could be scraped off in shreds.

Case 11.—Harry T——, Company F, Second Cavalry, took two ounces. Seen in ten or fifteen minutes. Had vomited; insensible; breathing stertorous; pulse about 60; respiration became very slow and feeble; pulse reduced to 40, scarcely discernible and intermittent; face purple. Treatment: Stomach washed out with a pint and a half of warm water. Spt. ammon. aromat., 3 ij., introduced before tube was withdrawn. Cold douche; stimulating enema; sinapisms. Sensibility returned in seven hours. Slight gastritis and jaundice followed. He was returned to duty.

Case 12.—Female adult, aged twenty-two, on March 24, 1857, took nearly one ounce. Seen in five minutes. Total insensibility; pupils dilated; pulse full and oppressed; foam at the mouth. Treatment: Fresh air, brandy-and-water, stomach-pump, ammonia to nostrils, cold water dashed in the face. March 27th was up, walking about; pulse regular and equal. Subject was an epileptic.

Case 13.—Female adult took on October 27, 1858, a wineglassful. Seen four and a half hours afterward. Pupils slightly contracted; pulse 84, moderately full; breathing abdominal, without stertor; total insensibility;

[1] For assistance in collecting the cases from the German medical journals I am greatly indebted to Drs. Behrend and Kolopinski, of this city.

Table of Reported Cases of Poisoning by the Internal Administration of Chloroform.

No.	Reference.	Reporter.	Sex.	Quantity taken.	Time elapsed before seen.	Pulse.	Respiration.	Pupils.	Result.	Remarks.
1	Lond. Med. Gaz., vol. xii., p. 675, 1851.	A. S. Taylor, M.D., F.R. S.	Male, 22 yrs.	℥iv.	3 hours.	65, small, became imperceptible.	Tranquil, afterward became stertorous and puffing.	Dilated, insensible to light.	Recovery complete in 4 days.	
2	Bull. Gen. de Thérap., etc., Paris, vol. xliii., p. 296, 1852.	Dr. F. A. Aran.	Male, 31 yrs.	30 grs. 30 gtt.	10 minutes.	Between 72 and 80.	Without uneasiness.	Neither dilated nor contracted.	.....	This case occurred during the course of treatment of "colica pictonum.
3	Monthly Jour. Med. Sc., Lond. & Edin., vol. xiv., p. 77, 1852.	E. R. Bickersteth, Esq.	Male, 27 yrs.	Two mouthfuls.	6 hours.	60, full and soft.	Stertorous and heavy.	Dilated.	Died in 36 hours.	Autopsy.
4	Ass'n Med. Jour., Lond., vol. i., p. 354, 1854.	F. H. Hartshorne, Esq.	Male, 4 yrs.	℥j. to ℥ij.	35 minutes.	Quick and full, then imperceptible.	Laborious, then stertorous.	Contracted, then varied.	Died in 3 hours.	No autopsy.
5	Dublin Hosp. Gazette, vol. i., Nov. 15, 1854.	Dominic Corrigan.	Male, adult.	℥ivss.	.....	.....	.....	.....	Recovery.	In a case of "delirium tremens," no bad effects.
6	Lond. Lancet, vol. ii., p. 159, 1856.	J. Spence, Esq., F.R.C.S.E.	Female, 21 yrs.	℥ij.	20 minutes.	78, soft and tolerably full.	Regular and tranquil, but continued to decrease until it fell to two a minute, and finally ceased for nearly two minutes.	Contracted.	Recovery complete in 7 days.	
7	Lond. Lancet, vol. ii., p. 159, 1856.	J. Spence, Esq., F.R.C.S.E.	Male, adult.	℥vj.	.....	.....	.....	.....	Died in 48 hours of acute gastritis.	Occurred at the Royal Infirmary, Edinburgh, cited from memory.
8	Ass'n Med. Jour., Lond., vol. ii., p. 733, 1856.	T. Holmes, Esq.	Male, adult.	℥ iijss.	Few minutes.	Frequent, weak and jerking.	Became slightly stertorous.	Varied.	Recovery, with slight gastritis following.	
9	Virg. M. and S. J., Richmond, vol. vii., p. 369, 1856.	— Frick, M.D.	Male. 23 yrs.	℥ iv. to ℥ v.	2 hours.	Imperceptible.	Became slower until faintly perceived.	Contracted, then very widely dilated.	Recovery in a few hours, gastritis following.	
10	Med. Exam., Phila., vol. xii., p. 659, 1856.	Junius Williams.	Female, 35 yrs.	℥jss.	20 minutes.	Slow and feeble.	Stertorous.	Contracted.	Died in 20 hours.	
11	Am. Jour. Med. Sc., Phila., vol. xxxiv., p. 367, 1857.	C. H. Smith, A.S., U.S.A.	Male, adult.	℥ij.	10 to 15 minutes.	About 60, became reduced to 40, and scarcely discernible and intermittent.	Stertorous, became slow and feeble.	.....	Recovery, with slight gastritis and jaundice.	
12	Med. Times and Gazette, Lond., p. 615, 1857.	H. D. Dean, M.R.C.S.L., S.A.	Female, 22 yrs.	Nearly ℥j.	5 minutes.	Full and oppressed,	.....	Dilated.	Recovery in 3 days.	
13	Lond. Lancet, vol. i., p. 400, 1859.	W. P. Bain, M.D.	Female, adult.	Wineglassful.	4½ hours.	84, moderately full.	Abdominal, without stertor, stopped for thirty seconds.	Slightly contracted.	Died on eighth day of acute gastritis.	Autopsy.]
14	Am. Med. Times, N. Y., vol. ii., p. 153, 1861.	T. C. Finnell, M.D.	Female, 18 yrs.	℥j.	20 minutes.	Feeble and quick.	Stertorous.	Contracted and insensible to light.	Recovery in 3 hours.	
15	Be. f. gerichtl. anthrap. Nurnberg, Bd. xii., p. 317, 1861.	.....	Male, 28 yrs.	½ lb.	2 hours.	.....	.....	.....	Death.	This case is very doubtful.
16	Med. Times and Gazette, Lond., vol. i., p. 478, 1862.	Alex. Lamm, M.D.	Male, 35 yrs.	℥jss.	7 hours.	Full though slow.	Hurried and audible.	Highly dilated, and insensible.	Death in 23½ hours.	Autopsy.
17	Med. Times and Gazette, Lond., vol. i., p. 577, 1862.	H. M. D. S., M.D.	Male, 50 yrs.	℥ij.	7 hours.	Slow and feeble.	Movements of thorax scarcely perceptible.	Widely dilated, and insensible.	Recovery complete in a week, gastritis following.	
18	Lond. Lancet, vol. ii., p. 7, 1863.	George Harley, M.D.	Female, 12 yrs.	℥ vj.	About 20 minutes.	Became imperceptible at wrists.	Stertorous, reduced to six in a minute.	Contracted.	Recovery complete in 10 days.	Chloroformic anodyne.
19	Med. Times and Gazette, Lond., vol. ii., p. 378, 1863.	W. B. Woodman, M.D.	Male, 72 yrs.	Nearly ℥j.	1 hour.	Imperceptible.	Slow, imperceptible.	Contracted.	Recovery in 2 days.	Liniment of chloroform and olive oil.
20	Australian M. J., Melbourne, vol. ix., p. 108, 1864.	F. Dowling.	Male, 28 yrs.	℥jss.	.....	Small, fast, and failing.	Slow and stertorous.	Dilated.	Death in 27 hours.	Autopsy.
21	L'Union Medicale, Paris, vol. xxiii., p. 155, 1864.	Dr. Martinenq.	Male, 40 yrs.	10 gms.	.....	.....	.....	.....	Recovery.	
22	Gaz. Med. de Strasbourg, p. 168, 1864.	Dr. Macker.	Male, 27 yrs.	50 gms.	½ to ¾ hours.	100, very feeble and small.	Stertorous, stopped at times.	Enormously dilated.	Recovery.	
23	Med. Times and Gazette, Lond., vol. i., p. 34, 1866.	Edward Bradford.	Male, 25 yrs.	℥j.	2½ hours.	At wrist scarcely to be felt; heart, pulsations about 120.	Stertorous, short and jerky, so in a minute, at times they almost ceased.	Contracted.	Death in 12 hours.	Autopsy.
24	Med. Record, N. Y., vol. ii., p. 54, 1867.	O. D. Pomeroy, M.D.	Female, 45 yrs.	3 v. to ℥ ix.	3 hours.	About 70, and feeble.	.....	.....	Death on eighth day of acute gastritis.	Autopsy.
25	Leavenworth Med. Herald, vol. i., p. 49, 1867.	D. W. Stormont, M.D.	Male, 26 yrs.	℥ij.	About 1 hour.	.....	Stertorous.	.....	Died in 1 hour.	Autopsy.
26	West. J. M., Indianapolis, vol. ii., p. 720, 1867.	J. E. Tefft, M.D.	Male, 28 yrs.	℥ij.	2 hours.	80, strong and full, became more frequent and feeble, and finally absent.	Stertorous and labored.	Natural, became dilated.	Recovery complete in a week.	
27	Pacific M. and S. J., San Fran., vol. ii., p. 499, 1868.	I. R. Prevost, M.D.	Female, adult.	℥ij.	2 hours.	Rather full and accelerated, soon became pulseless.	Stertorous.	Dilated.	Died in 19 hours.	

Table of Cases of Poisoning by the Internal Administration of Chloroform (Continued).

No.	Reference.	Reporter.	Sex.	Quantity taken.	Time elapsed before seen.	Pulse.	Respiration.	Pupils.	Result.	Remarks.
28	Deutsche klin. Biol., Bd. xxi., p. 196, 1869.	E. Fitzau.	Male, 57 yrs.	90 gms.	3 hours.	Small and intermittent, became regular.	Impeded.	Widely dilated, insensible to light.	Death in 29½ hours.	
29	Australian M. J., Melbourne, vol. xvi., p. 108, 1871.	J. E. Neild, M.D.	Male, 28 yrs.	℥j.	½ hour.	Too small to count.	Labored and interrupted.	Widely dilated.	Death in 60 hours.	Autopsy.
30	Australian M. J., Melbourne, vol. xvi., p. 108, 1871.	— Blair, M.D.	Female, adult.	℥ij.	.....	.....	.....	.....	Recovery.	Related in discussion of No. 29, Med. Soc. Vict'a. (case of 1865)
31	Australian M. J., Melbourne, vol. xvi., p. 210, 1871.	W. C. Rees, M.B., M.R.C.S.E.	Male, 13 yrs.	℥ss.	4½ hours.	100, feeble and irregular.	Sighing and laborious.	Dilated ⅗	Recovery complete next day.	
32	Phila. Med. Times, vol. i., p. 277, 1871.	A. Fricke, M.D.	Female, 45 yrs.	Tablespoonful.	Immediately.	.....	.....	.....	Recovery.	
33	Med. and Surg. Rep., Phila., vol. xxiv., p. 495, 1871.	S. M. Snyder, M.D.	Male, adult.	About ℥xij.	½ hour.	80 to 88, feeble.	40, quick and somewhat difficult.	Dilated, then varied.	Recovery, with gastro-enteric symptoms following.	
34	Deutsche klin. Biol., Bd. xxiii., p. 415, 1871.	H. Böttger.	Female, 58 yrs.	30 gms.	Immediately.	Pulseless.	Intermittent.	.....	Recovery.	Ether and chloroform, each 30 gms.
35	Indian Med. Gazette, Calcutta, vol. viii., p. 182, 1872.	Banergie, Sub. Asst. Surg.	Male, 40 yrs.	About ℥j.	4 hours.	Exceedingly feeble, and almost imperceptible.	Heavy and stertorous.	Contracted.	Recovery in 8 hours.	
36	Am. Jour. Med. Sc., Phila., vol. lxiv., p. 430, 1872.	S. C. Busey, M.D.	Female, 4 yrs.	Teaspoonful.	½ hour.	Almost imperceptible.	Short, quick, irregular, and superficial.	Contracted.	Recovery complete in 4 hours.	
37	Am. Jour. Med. Sc., Phila., vol. lxiv., p. 431, 1872.	S. C. Busey, M.D.	Female, 30 yrs.	℥iij.	1½ hour.	78, small and very weak.	16, very superficial, every fifth long drawn and full.	Contracted to a point, and insensible to touch.	Recovery complete next day.	
38	Med. Arch., St. Louis, vol. viii., p. 79, 1872.	J. C. Whitehill, M.D.	Female, 50 yrs.	℥ss.	15 to 20 minutes.	Quick, feeble, and almost indistinct.	Labored.	Nothing peculiar.	Recovery.	
39	Atlanta M. and S. Jour., vol. x., p. 236, 1872.	J. T. Johnson, M.D.	Female, adult.	Nearly ℥vj.	½ hour.	80, full.	36, imperfect.	Dilated.	Recovery in 3 or 4 days with slight gastritis.	
40	Arch. f. klin. Med., Leipg., Bd. x., p. 309, 1872.	Dr. Degen.	Male, 48 yrs.	℥j.	3 hours.	Slow, full, regular.	Slow and regular.	.....	Recovery.	
41	Lond. Lancet, vol. i., p. 113, 1874.	B. M. Webster, M.D.	Female, adult.	℥j.	Few minutes.	Almost gone.	....	....	Recovery with slight gastritis.	
42	Canada Lancet, Toronto, vol. vi., p. 209, 1874.	H. J. Saunders, M.D., M.R.C.S.	Male, 60 yrs.	℥ss.	10 minutes.	Almost imperceptible	Shallow and prolonged, became feeble and expirations cold.	.....	Recovery in 1 day.	
43	Med. Times and Gazette, Lond., vol. i., p. 36, 1878.	Hamilton and Bateman.	Male, adult.	℥jss.	45 minutes.	Very intermittent.	Irregular, occasionally stopped.	Dilated and fixed.	Died in 26½ hours.	Autopsy.
44	Louisville Med. News, vol. vi., p. 15, 1878.	J. A. Larrabee, M.D.	Female, 20 yrs.	℥j.	5 hours.	Pulseless.	.....	.....	Recovery.	
45	Chicago M. J. and Exam., vol. xxxvi., p. 398, 1878.	E. F. Ingals, M.D.	Female, adult.	℥vj.	½ hour.	80, and failing.	Nearly normal, became inefficient, and ceased, so that life was only sustained by artificial respiration.	.....	Recovery.	
46	Brit. M. J., Lond., vol. ii., p. 94, 1879.	Barclay and Macrae.	Male. 23 yrs.	℥ijss.	8 to 10 hours.	Not to be felt anywhere.	Slow, shallow, and at long intervals.	Dilated and fixed.	Recovery.	Hanged himself on the third day, from depression of spirits.
47	Chicago M. J. and Exam., vol. xxxix., p. 379, 1879.	P. O'Connell, M.D.	Male, 27 yrs.	℥iij.	2 hours.	72, full and soft.	Full, deep, and quick.	Dilated.	Recovery next day.	
48	Jour. de Thérap., Paris, vol. vii., p. 140, 1880.	Dr. Reuss.	Female, adult.	50 to 60 gms.	3 to 4 hours.	Imperceptible at radial, thready at temporal and carotid; became stronger.	Difficult and stertorous.	.....	Death in 31 hours.	Autopsy.
49	South. M. Rec., Atlanta, vol. x., p. 398, 1880.	W. T. Nicholson, M.D.	Female, adult.	℥j.	Several hours.	80, weak.	Stertorous and difficult; 45 in a minute.	.....	Recovery.	Temperature in axilla, 94.7° F.; vagina, 95.2° F.
50	Aerzt Bericht des k. k. Allegem. Krankenhaus zu Prag., for 1880, p. 41.	Eiselt's Med. Clinic (Thomayer).	Male, 60 yrs.	20 gms.	½ hour.	72, moderately full and rhythmic, became dicrotic.	Stertorous, became labored.	Highly contracted, and insensible.	Recovery.	Chloroform and olive oil, equal parts.
51	Brit. M. J., Lond., vol. i., p. 775, 1882.	James Oliver.	Male, adult.	℥iij.	1½ hour.	20, hardly felt at wrist.	Had ceased.	Widely dilated.	Recovery.	
52	St. Louis Cour. Med., vol. x., p. 228, 1883.	J. Freedman, M.D.	Female, adult.	Tablespoonful.	.....	....	.....	.....	Recovery.	
53	St. Louis Cour. Med., vol. x., p. 228, 1883.	J. Freedman, M.D.	Female, adult.	℥ij.	.....	.....	....	.....	Recovery.	Equal parts of laudanum and chloroform.
54	St. Louis Cour. Med., vol. x., p. 229, 1883.	J. Freedman, M.D.	Female, adult.	℥j.	.....	.....	.....	....	Recovery.	
55	Arch. Pediatrics, vol. i., p. 108, 1884.	T. E. McArdle, M.D.	Female, 6 yrs.	℥ij.	Soon after.	Nearly pulseless.	Very feeble.	.....	Recovery complete in a few hours.	
56	Annuaire de Thérap. vol. xviii., 1855.	....	Female, 21 yrs.	℥j.	20 minutes.	70, soft and full, became almost imperceptible.	Regular, became slow and stertorous, and fell to two a minute.	Contracted.	Recovery in about a week.	See addenda 56.
57	....	L. Eliot, M.D.	Male, 60 yrs.	℥ji.	10 minutes.	70, weak.	Sighing respiration.	Dilated.	Recovery.	

respiration stopped for thirty seconds. Treatment: Stomach-pump and sinapisms. Gastritis followed and she died on the eighth day after taking the poison. Post-mortem examination showed congestion and ulceration of the stomach.

CASE 14.—Julia W——, aged eighteen, took one ounce. Seen in twenty minutes. Fell to the floor; burning pain in stomach; pulse feeble and quick; countenance pallid; extremities cold; became gradually comatose; breathing stertorous; pupils contracted and insensible to light. Refused to take medicine. Treatment: ʒ j. powdered ipecac was forced down her throat, vomiting followed. Mustard to extremities, cold water dashed on face, and flagellations at short intervals. In three hours she was entirely recovered. Case of attempted suicide.

CASE 15.—Adult male, aged twenty-eight, was found in a semi-comatose condition. Had attempted to disembowel himself; had shot himself in each side of the chest, and stated that he had taken one-fourth pound of chloroform. Taken to hospital. No smell of nor any symptoms of chloroform poisoning. Was seen in two hours. Death.

[This case is abstracted from a newspaper report, contains no physician's name, and is of very doubtful authenticity.—L. E.]

CASE 16.—Mr. P. M——, aged thirty-five, between 12.15 P.M. and 7.15 A.M. (in seven hours) took about an ounce and a half. When seen pulse full, though slow; respiration hurried and audible; pupils highly dilated and gave no evidence of sensibility. Treatment: Fresh air, ice-bladders to head, cold effusions along the spine, and a common enema; electricity; warm jars to feet; lavement, with the addition of twelve to fifteen drops of caustic ammonia was given and retained. There was partial return of sensibility. Death occurred at a quarter to twelve, midnight, twenty-three and a half hours after taking the first dose. Post-mortem examination showed congestion of brain, lungs, and stomach.

CASE 17.—Mr. ——, aged fifty, on April 6, 1862, took two ounces. Seen seven hours after. Condition: Deep coma; pupils widely dilated and insensible; pulse slow and feeble; body colder than natural; movements of thorax scarcely perceptible; sensation generally abolished. Treatment: Ammonia, sinapisms, bottles of hot water, and cold affusions, without apparent benefit; stomach-pump tube introduced, stomach evacuated of chloroform, mucus, and watery fluid. Patient soon showed signs of returning consciousness, and in two hours was able to give rational answers. In a week he had entirely recovered from the gastritis which followed.

CASE 18.—M. A. McG——, aged twelve, on January 10, 1862, took six drachms of chloroformic anodyne. Seen in about twenty minutes (approximated time, E.). Felt sick and vomited; was in a deep stupor in ten minutes, perfectly insensible; pupils contracted; face livid; breathing stertorous, reduced to six a minute; pulse became imperceptible at wrists. Treatment: Stomach-pump, then, three hours after, an injection into the stomach of a pint of hot coffee with three drachms of spirit of nitric ether, and repeated; cold stream of water to the head. In fifty-four hours she was up and able to walk across the room. She suffered about ten days from bronchitis, the result of the cold water. The chief ingredients of chloroformic anodyne are: strong solution of opium, some chloroform, and a few drops of hydrocyanic acid (prussic acid odor was perceptible in the vomited liquid).

CASE 19.—An Irishman, aged seventy-two, took, on February 20, 1863, nearly an ounce (wineglassful of a liniment composed of chloroform and sweet oil). Seen in one hour. Insensible; cold; slow, imperceptible respiration; pallid face; imperceptible pulse; pupils contracted. Treatment: Emetics; stomach-pump; internal stimulants, coffee and brandy; hot bottles to feet. Recovered on second day.

CASE 20.—R. K——, male, aged twenty-eight, on February 16, 1864, at 2 P.M., took an ounce and a half. Body cold; breathing slow and stertorous; pulse small and fast failing; pupils dilated. Treatment: Stomach-pump. Death at nine o'clock on the 17th (in twenty-seven hours). Post-mortem examination showed: Brain and membranesmuch congested; lungs congested; heart natural; mu-cous membrane of stomach and duodenum much congested.

CASE 21.—Male, aged forty, took ten grammes. "I felt at first an acrid taste with a constriction of the windpipe, then quite a painful heat in the epigastric region; then followed a grinding pain in the intestines, finally a desire to have a passage, which was accompanied by a smarting and strong intestinal pains at the anus." He had taken some Seidlitz water in the morning. Treatment: Emollient and albuminous drinks, oil injections, and fresh air. Recovered.

CASE 22.—Male, adult, aged twenty-seven, on October 29, 1863, took fifty grammes. Seen in half an hour. Had vomited. Dorsal decubitus, completely immobile; skin discolored and cool; extremities cold; eyes convulsed and turned up; pupils enormously dilated; respiration stertorous; pulse, 100, very feeble and small; heart-beat short and clear, at times tumultuous. Unconscious. Respiration ceased from time to time. Treatment: Heated iron to chest, frictions to all parts of the body; titillated pharynx with feather; artificial respiration; injections of strong infusion of coffee; internally strong coffee and aqua ammonia. Some gastritis and icterus followed. Recovered.

CASE 23.—Male, aged twenty-five, took, on November 25, 1865, one ounce. Seen in two and a half hours. Complete insensibility; countenance pale; lips livid; pupils contracted; breathing stertorous; body warm; pulse at wrist scarcely to be felt; pulsations at heart heard and felt, about 120; respirations short and jerky, 20 in a minute, at times they almost ceased; unable to swallow. Treatment: Attempted to excite vomiting by feather; strong ammonia to nostrils; cold water dashed on face with no effect; stomach-pump tube introduced induced suspension of respiration and pulse, and was abandoned; ammonia to region of heart, legs, thighs, nape of neck, and spine without good effect; injections of hot water and turpentine thrown into the rectum. There was slight improvement, but death took place twelve hours after taking. Autopsy showed congestion of lungs and cardiac vessels. (This was a case of supposed chloroform-poisoning; the amount taken was approximated. "The coroner's jury were unable to come to a decision as to the immediate cause of death."—L. E.)

CASE 24.—Mrs. D——, aged forty-five, recovering from a drunken debauch, took, with suicidal intent, from five to nine drachms. Seen in three hours. Profound coma; extremities cold; pulse about 70, and feeble. Death seemed so imminent that no efforts were made to counteract the drug. The chloroform produced sleep in a few minutes after taking it. In three hours more (six all told) she had somewhat reacted. In seven hours she had recovered consciousness. Acute gastritis set in and she died on the eighth day. Was jaundiced on the fourth day. Autopsy: Left lung collapsed and slightly adherent to pleura, right in state of gray hepatization; liver normal in size, fatty, presenting signs of commencing cirrhosis; kidneys normal in size and a little granular; œsophagus, nothing worthy of notice; stomach, fulness of blood-vessels, spot of extravasation on inner wall, nearly an inch in diameter; its mucous membrane at this point seems to be destroyed. Gastritis was the cause of death.

CASE 25.—Mr. G. H——, aged twenty-six, took two ounces. Seen in one hour, a few minutes before his death. In three minutes (estimated time) he could with difficulty be aroused from the stupor into which he was sinking; could not speak, but indicated that he had severe pain in the stomach. In five minutes he was entirely unconscious, lying still, breathing stertorously

Medical assistance arrived too late to be of service. Post-mortem examination showed congestion of lungs, œsophagus, and stomach. Mucous membrane could be pulled off with the finger-nail.

Case 26.—Male, aged twenty-eight, took two ounces undiluted. Seen in two hours. Profound coma; pupils natural but insensible to light; pulse about 80, strong and full; breathing slightly stertorous. In two hours the pulse became frequent and feeble; respiration gasping and stertorous; pupils dilated; pulse became entirely absent at wrist; breathing very labored. Treatment: Sinapisms; dry heat; friction to extremities; administration per rectum of brandy and carbonate of ammonia; hot brandy and hot turpentine to the spine. Gastritis followed, but was recovered from in a week.

Case 27.—Female, adult, with suicidal intent, took two ounces (approximated, L. E.). Seen in two hours. Most profound insensibility; lips and face cool and bluish; extremities still warm; breathing stertorous; pupils dilated; pulse rather full and somewhat accelerated. A physician had been called, but pronounced the case hopeless and had abandoned it. Deglutition was impossible. Drew forward the tongue, ventilated the room, dashed cold water in the face, and had the extremities rubbed with hot mustard-water, ammonia occasionally applied to the nostrils; galvanic battery; injections of warm infusion of coffee, and hot bottles to the feet. She grew worse, becoming soon entirely pulseless, extremities icy cold, conjunctiva injected, and pupils still more enlarged. Application of galvanism continued; in an hour the breathing had lost its stertor, and she opened her eyes at intervals. Injection of coffee and brandy, and external stimuli. She regained sensibility slowly; the stomach rejected brandy and coffee. Pulse could not be detected at the wrist. Hemorrhage from the bowels. Given aromatic spirits of ammonia and tincture of larch. Her bowels had moved three or four times. Death in nineteen hours. Autopsy not permitted.

Case 28.—Physician, aged fifty-seven, took ninety grammes. Vomited; deep sopor came on. Was bled and cold applied to head. Dr. Fitzau arrived in three hours. The extremities were warm; there was complete anæsthesia; total paralysis; heart weak, every third beat intermittent; respiration impeded; bowels distended with gas; pupils insensible to light and widely dilated. Stomach-pump. Pulse became regular. Owing to the paralysis, when the tongue, which had been held out, was let go, the respiration ceased. Sensibility was completely restored. Severe gastritis followed. Death in twenty-nine and a half hours. Post-mortem examination not permitted.

Case 29.—Adult, male, aged twenty-eight, on March 27, 1871, took one ounce. Seen in half an hour. Insensibility; breathing labored and interrupted; pulse too small to count; pupils widely dilated; extremities cold; anæsthesia complete. Salt-and-water emetic, followed by vomiting. Stomach-pump, hot bottles to feet and sides, and covered with blankets; injections of ammonia into median-cephalic vein, repeated. Improved, but died in sixty hours. Autopsy: Brain congested; right lung and pleura congested; lower part of trachea congested; œsophagus congested; mucous membrane of stomach congested.

Case 30.—Female, adult, took two ounces. Given sulphate of zinc, then aromatic spirits of ammonia. Recovery. This was related in the discussion upon the preceding case.

Case 31.—Boy, aged thirteen, on May 25, 1871, took half an ounce. Seen in four and a half hours. Comatose; respiration sighing and laborious; pupils dilated two-thirds; pulse feeble and irregular, 100 to the minute; extremities cold; no convulsions; vomited. With stomach-pump threw in one drachm of sulphate of zinc, and repeated; given coffee and carbonate of ammonia. Recovered, and returned home next day.

Case 32.—Mrs. H——, aged forty-five, took a tablespoonful in water for liq. ammon. acetat. Was instantly given a pint and a half of lukewarm water; vomiting followed. Complained at once of burning sensation; in eight minutes she was unconsicous. Bowels and bladder evacuated involuntarily. Brandy freely given, also salad oil and yolk of egg. In the afternoon much improved, but very feeble.

Case 33.—Male, adult, took about twelve drachms. Seen in three-quarters of an hour. Insensible; pulse 80 to 88 and feeble; pupils widely dilated; breath highly charged with chloroform, and respiration 40, quick and somewhat difficult. During the first four hours the pupils remained dilated, then dilated and contracted every few minutes and not affected by strong light. Pulse remained about the same throughout. The respiration was affected singularly. When the body rested on the right side with the head drooping forward and downward it would be about 40 and regular. If the body were placed on the back it would be entirely suspended. The face was livid, the lips red and dry. Cutaneous surface during first six hours was natural, during the last two covered with free perspiration. Comatose condition lasted eight hours. Treatment consisted in free ventilation, cold applications to the head, and whenever the respiration was arrested forcing the finger up under the diaphragm. After consciousness had returned symptoms of gastro-enteric inflammation were present. He recovered completely.

Case 34.—Frau N. N——, aged fifty-eight, took thirty grammes each of sulphuric ether and chloroform. Seen immediately. Præcordial anxiety; pulseless, senseless, and with intermittent respiration; skin was bleached, cyanotic; paralysis general. Had vomited. Artificial respiration; faradization to nervous phrenicus for two hours, when this was stopped the respiration stopped; it was continued for six hours. Sensibility returned. Was given a subcutaneous injection of strychnine. Recovery was complete.

Case 35.—A jemidar, aged forty, on March 26, 1872, took about one ounce at 4 A.M. to poison himself. Seen at 8 A.M, four hours later. Condition: Perfectly insensible, with half-shut eyes and contracted pupils; countenance pale; breathing heavy and stertorous; pulse exceedingly feeble, almost imperceptible; all the muscles relaxed and there was no sensation. Stomach-tube introduced and about two pints of water containing twenty grains of sulphate of zinc injected. Stomach washed out several times. Brandy and ice given. In eight hours he walked away unassisted.

Case 36.—Female, aged four, on May 28, 1872, took a teaspoonful. Seen in half an hour. Appeared as one partially intoxicated. Had been given teaspoonful of olive oil, this was followed by draught of warm water. Vomiting soon followed; sank quickly into profound coma; pallor of features; sunken eyes, contracted pupils, insensibillty of cornea; unusual muscular relaxation; complete anæsthesia; coldness of extremities; almost imperceptible pulse; short, quick, irregular, and superficial breathing. Treatment: Elevated chest, lowered head; artificial heat; small quantities of brandy. Deglutition interrupted, slow, and difficult. Artificial respiration. Consciousness returned in one hour, and in four hours she was entirely recovered

Case 37.—Female, aged thirty, took three drachms. Seen in about an hour and a half. Convulsions; intense pain in the abdomen; perfectly insensible; pupils contracted to a point, corneæ insensible to the touch; universal anæsthesia; extreme pallor of face; cold hands and feet, general surface cool; pulse 78, small, very weak; respiration 16, very superficial, every fifth respiration long-drawn and full. Treatment: Emetic of warm water and salt and mustard; ice to spine; brandy internally. Recovery complete in one day. In this case the patient had taken chloroform, 3 iij.; tinct. camphor, 3 iij.; and tinct. opii, 3 jiss., in addition to 3 ij. of tinct. of opium.

Case 38.—Tillie ——, aged fifty, took half an ounce for lime-water. Seen in from fifteen to twenty minutes.

Breathing labored; pulse quick and feeble, almost to indistinctness; impossible to arouse her; surface covered with cool perspiration; nothing peculiar about eyes. Treatment: Fresh air, frictions to extremities, warm milk and lime-water freely, with whiskey or brandy and ammoniated tincture of valerian. Gastritis for several days following.

CASE 39.—Woman, took nearly six drachms. Seen in half an hour. Pulse 80 and full; respiration 36 and imperfect; pupils dilated. Treatment: Enema of one ounce spirit vini gallici; three-fourths grain morphia subcutaneously. The effect was immediate and marked; patient rallied, but depressive sinking again threatened in an hour or two, to be as promptly relieved by a repetition of the treatment. Six hours after swallowing the chloroform she gave the first sign of consciousness. Gastritis followed for three or four days.

In the discussion which followed Dr. Wilson stated that he had seen a man supposed to have taken four ounces; he appeared wild and excited, as if he had been on a spree (Report Atlanta Academy of Medicine).

CASE 40.—Adult male, aged forty-eight, took one ounce. Seen in three hours. Respiration slow and regular; pulse slow, full, and regular; stomach emptied at time of taking by vomiting. After twelve hours sensibility returned. Complete recovery. No bad effects followed.

CASE 41.—Adult female, took one ounce. Seen in a few minutes. Pulse almost gone, face livid; deglutition impossible. Treatment: Lowering the head of the bed and the use of ammonia externally with friction. Recovery with slight gastritis.

CASE 42.—T. D——, male, aged sixty, took ℥ ss. Seen in ten minutes. In five or six minutes became insensible; respiration shallow and prolonged; pulse at wrist so feeble as to be almost imperceptible. Mustard to pit of stomach, nape of neck, and calves. Paralysis of sphincter ani, ammonia and brandy not retained. Respiration became feeble and expirations cold; artificial respiration. In about two hours after taking the chloroform he was able to sit up and take some weak brandy-and-water. No bad effects followed.

CASE 43.—C. McK——, admitted to Royal Free Hospital, October 20, 1877. Had taken one ounce and a half from 6.30 to 7.15 P.M. Seen in forty-five minutes. Unconscious; breathing irregular and occasionally stopped; pulse very intermittent; pupils dilated and fixed. Teatment: Stomach-pump, artificial respiration, and galvanism; nitrite of amyl on lint without effect; enema of three drachms aromatic spirits of ammonia; brandy and milk. Died about 8.45 P.M., October 21st. Autopsy showed lungs intensely congested; stomach congested; intestines, first five feet congested, vessels of intestines generally congested; peritoneum and omentum congested; other organs normal.

CASE 44.—German woman, aged twenty, took one ounce. Seen in five hours. Deep stupor; pulseless and fast sinking. Treatment: Electricity of no use. Nitrite of amyl inhalations same. Hypodermic of digitalin, one-tenth grain, over scorbiculis cordis, repeated in an hour, then one-tenth grain of atropia an hour later. Recovery without gastric or œsophageal trouble.

CASE 45.—Young lady, took six drachms. Seen half an hour after. Thoroughly anæsthetized; respiration nearly normal; pulse 80. Had vomited, and vomited again on arrival of Dr. Ingals. Respiration became inefficient and pulse failing. Inhalations of ammonia and one-twentieth grain of strychnia sulphate given hypodermically, a second one of one-fortieth grain in about three-quarters of an hour. Respiration ceased so that life was only sustained by artificial respiration. Electricity to nape of neck, the other pole to the pit of the stomach and various parts of the chest. Recovered consciousness in five hours after taking the drug. Nausea and vomiting were the only bad effects.

CASE 46.—Male, aged twenty-three, from 9 to 11 P.M. took two and a half ounces. Seen in eight to ten hours. Pale; pupils dilated and fixed; breathing slow, shallow, and at long intervals; pulse not to be felt anywhere; heart-sounds could not be heard by stethoscope; trunk warm, extremities cold. Warm brandy-and-milk injected into bowels; sinapisms, frictions, artificial respiration. Recovery from chloroform, but died on third day by hanging, from depression of spirits. Autopsy showed lungs congested.

CASE 47.—R. S——, male, aged twenty-seven, on August 16, 1879, took three grammes. Seen in two hours. Pulse 72, full, soft, normal probably; respiration full, deep, quiet; pupils dilated; no danger apprehended. Recovery next day. August 19th, 7 A.M., jaundiced; respiration labored; pupils widely dilated; no pulse at wrists; temperature 36.70° C. in axilla. Death at 4 P.M. There is much doubt about this case. Autopsy afforded no evidence. Dr. O'Connell does not think it was chloroform, but phosphorus.

CASE 48.—Adult female, on January 17, 1879, took fifty to sixty grammes. Seen in about four hours. Deep intoxication; artificial respiration. Respiration returned, but difficult and stertorous; pulse at radials imperceptible, at temporals and carotids thready; extremities cold and rigid; strong contraction of jaws. Titillation of pharynx, cold affusions and flagellations. Pulse became stronger. Given strong coffee and acetate of ammonia. Gastritis followed. Died (9 A.M. on 18th) in thirty-one hours. Autopsy showed ulcerations in pharynx, œsophagus, stomach, and intestines; mucous membrane of œsophagus corroded in its whole length; ulcerations of stomach small, of intestines enormous; lungs intensely congested.

CASE 49.—Female, adult, took about one ounce. Not seen for several hours. Profound narcosis; stertorous breathing; cheeks and face pallid and cold; the eyes remained open or shut as they were left; pulse 80, weak; respiration 45 per minute, and difficult. Thermometer in axilla registered 94.70° F., taken three times; in the vagina it registered 95.2° F. Treatment: Caffeine hypodermically and per orem, then hypodermics of strychnia, and whiskey with carbonate of ammonia (ammonia carbonate one gramme dissolved in one drachm of whiskey), followed quickly by strychnia sulphate, gr. $\frac{1}{48}$. Recovered.

CASE 50.—Laborer, aged sixty, took liniment of chloroform and oil, each twenty grammes, at 3 P.M. At 3.30 P.M. unconscious; stertorous respiration; cheeks, lips, and tongue highly cyanosed; whole body in viscid perspiration; pulse 72, moderately full and rhythmic; pupils highly contracted; cervical veins distended. No reflex excitability; vomited once. Stomach-pump brought away chloroform-smelling yellow fluid; stomach washed out. Pulse dicrotic; respiration labored; conjunctivæ insensible. Tongue drawn out, respiration became easier; ammonia to nostrils; cold frictions; black coffee introduced into stomach by pump; involuntary evacuation of the bowels; vinegar enema. 5 P.M.: Spontaneous cough. In removing mucus from mouth, brought out tobacco-quid not observed before. 5.15 P.M.: Semi-conscious. Twenty-four hours afterward chloroform-smell from contents of stomach drawn through pump.

CASE 51.—Frenchman, took three ounces. Seen in an hour and a half. Respiration had ceased; pulse twenty per minute and hardly felt at wrist; surface cold and of dusky pallor; lips livid; pupils widely dilated. Treatment: Artificial respiration; magneto-electric machine; enemata of beef-tea and brandy; subcutaneous injections of ether over heart. Inhalations and subcutaneous injections of nitrite of amyl gave but temporary relief. Recovered.

CASE 52.—Adult female (about a tablespoonful) half ounce. Severe convulsions; burning pain in stomach. Morphia sulphate, gr. ¼ hypodermically. Only sequelæ were burning of mouth and throat.

CASE 53.—Adult female, took half ounce of toothache-

drops composed of equal parts of chloroform and laudanum. Only bad result burning of throat and mouth.

CASE 54.—Adult female (old) took one drachm. In five minutes had convulsions. Hypodermic of morphia sulphate.

CASE 55.—Louise R——, aged six, in December, 1883, took two drachms Squibb's chloroform undiluted. Seen soon after. Respiratory efforts very feeble; heart-beats scarcely perceptible; conjunctivæ not responsive; teeth clenched; limbs fell listlessly where placed; cold and nearly pulseless. Had been given emetic of sulphate of zinc; vomited. Artificial respiration and electricity over phrenic nerve; after improvement, cracked ice, stimulants and keeping patient awake were the measures employed. Recovery complete in a few hours. [In a communication from Dr. McArdle, he states he saw this patient in about half an hour.—L. E.]

CASE 56.—"The patient was a female, twenty-one years of age, who had swallowed two ounces of pure chloroform. She was found within twenty minutes afterward in a deep stupor; the pupils contracted; respiration regular; pulse 70, soft and full; the face not congested. External irritants were applied; the stomach-pump used, and brandy and ammonia given. The respiration then became slow and stertorous, the pulse fell, and the face became livid. Galvanic shocks were employed and continued for two hours, with stimulating enemata, and heat to the limbs. The respiration fell to two in a minute; the pulse at the wrist was almost imperceptible. The remedies were persevered in, and reaction gradually took place. In five or six hours . . . consciousness returned. On the following day there was thirst, nausea, pain in the abdomen and lumbar region, and frequent and bloody stools. In about a week recovery was complete."

[Note: This case is extracted from Stillé's "Therapeutics and Materia Medica," vol. i., p. 194, ed. 1860, as the volume of the "Annuaire de Thérap." is not on file at the Library of the Surgeon-General's office. I think it corresponds to Case No. 6 by Spence.

June 7, 1885.

TREATMENT OF LOOSE CARTILAGE OF THE KNEE-JOINT.

BY ALEXANDER HADDEN, M.D.,

NEW YORK.

FOR the treatment of loose cartilage in the knee-joint there have been devised, baring the radical cure by direct or indirect incision, several means, none of which have proven as efficacious as the method which I have adopted in the following case.

About a year ago Mr. G——, aged fifty-five, consulted me concerning a loose cartilage in his knee-joint, for which he had sought advice from many of our prominent surgeons in this city, none of whom, except by operation, could offer him any positive alleviation from this troublesome affection.

Often, he stated, while walking through the streets, he would be suddenly seized with a pain in the joint so severe that he would fall to the ground entirely helpless. He had tried all the palliative methods recommended by the surgeons whom he had consulted—such as posterior splints, plaster-of-Paris bandages, elastic knee-caps, and even absolute rest for some months at a time—none of which remedies prevented the cartilage from slipping down and being caught between the articular surfaces of the bones of the joint and causing him this excruciating pain. Upon physical examination I found the joint swollen and very tender, and by a little manipulation could detect a small cartilaginous ovoid body (about half an inch by three-fourths inch) under my fingers, which could be pushed from one position to another without much difficulty when the leg was extended.

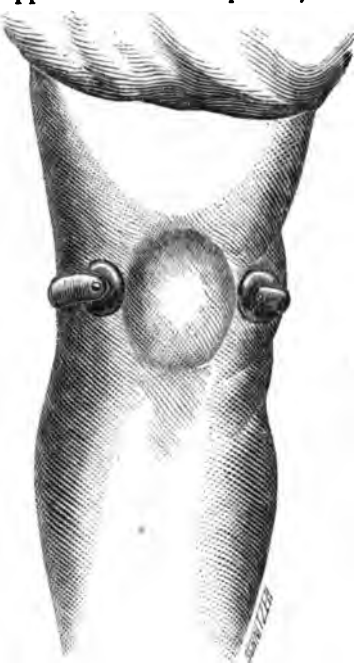
As long as the leg was flexed the cartilage could not be displaced, but was fixed in the position where it was, held by the surrounding structures then in a tense condition.

When the leg was extended I could push the cartilage up, by the side of the patella, around in the synovial sac, beneath the tendons of the quadriceps extensor muscles and accessory band of the vastus internus, down the other side of the patella and back again.

There seemed to be a canal through which this little body bobbed up and down and in and out of the joint-cavity. The bandages which had been applied relieved him as long as he did not walk about.

As his business required him to be up and about, and as he did not wish to run the risk of an operation, which the surgeons pronounced hazardous, he consulted me to find out if I could not do something for him.

By manipulating the cartilage I got it up beside the upper border of the patella, and thought if I could only keep this little body in that position, and retain it there by some appliance which would at the same time occlude the passage through which it got down into the joint, I would have accomplished the desideratum, which rest, splints, and bandages failed to do.



Accordingly, the most practical appliance I could obtain at the time for this purpose was an infant's double truss, placed so that the two pads pressed upon the lower end of the femur between the condyles and the patella, with the greatest pressure on the former bone. This fitted it quite well, and demonstrated the practicability of my idea.

I accordingly gave orders to have a single steel spring made with pads to press on each side of the patella, as shown in the above figure; the curvature of the spring being so formed as to clear the popliteal space behind and so as not to interfere with flexion of the leg, and of sufficient strength to close the canal while the limb was in a straight position.

A small strap may be fastened to the pads over the patella, and tightened to suit the convenience of the patient, and which may help to keep the spring in a more fixed position; this, though, is not entirely essential. This apparatus has so far succeeded that from the time of its application to the present day the cartilage has never slipped down to give him trouble, and the patient has been about pursuing his business without the least inconvenience from it.

HOMŒOPATHIC PIES.—The Boston *Traveller* tells the following on the authority of a truth-telling auctioneer of that city: "A year or more ago, the auctioneer had for sale a lot of homœopathic medicines. All these medicines were dumped into one pile, and disposed of in one lot, there being various kinds of medicines in the mass. A boarding-house keeper bought the lot, and some days after the purchase, the auctioneer asked her, 'What did you do with that homœopathic medicine, Mrs. ——?' She replied, 'I thought I could use it, and it was cheap and so I crushed it under the roller and then filled my sugar-bowls with it. The boarders seemed to like it, and especially when powdered over pies.'"

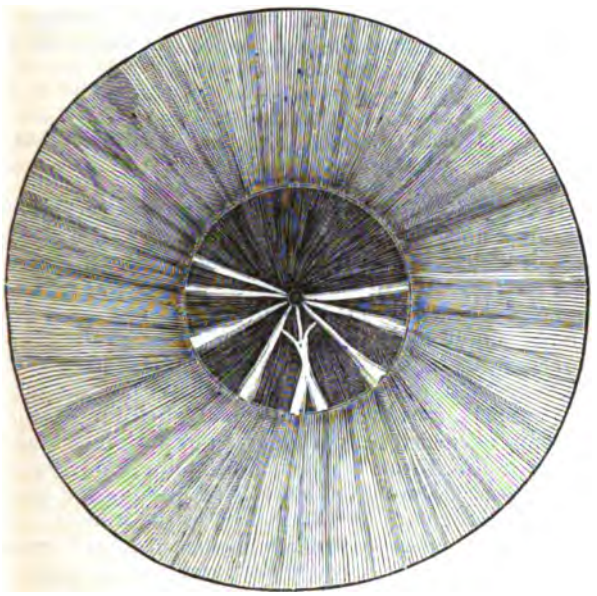
PERSISTENT PUPILLARY MEMBRANE.

By GEO. HOWE, M.D.,

COLUMBIA, S. C.

In your issue of April 4, 1885, Dr. F. C. Riley reports a case of persistent pupillary membrane which is very interesting, and which induces me to report a similar case which occurred in my practice in 1881.

F. T——, female, ten years old. O.D.V. $\frac{1}{10}$ by looking askance, O.S.V. perception of light, with questionable perception of form. By oblique illumination congenital cataract was discovered in the left eye. In the right eye there was a persistent pupillary membrane, which extended over the temporal half of the right pupil. It consisted of eight or ten bunches of fibres of a brown color, a shade lighter than the iris. These fibres united at the centre of the pupil. They were wider at the edge of the pupillary margin of the iris, and became more attenuated as they approached the centre of the pupil. Here they came together, forming a thickened point. Under the influence of atropia the fibres were lengthened, and became thinner.



The accompanying drawing was made from memory, and does not show the irregularities of the different masses of fibres.

Thinking that vision might be improved by breaking down the fibres, I introduced a stop-needle and tore them loose. They contracted promptly toward the iris. There remains, however, an opacity at the point of attachment to the lens capsule in the centre of the pupil.

Vision was improved sufficiently to enable her to read by holding her book so as to look through the clear portion of the pupil on either side of the central opacity.

The eyes do not seem over-sensitive, but tire somewhat after protracted use.

THE POWER OF DISINFECTANTS.—Volkmann says: "A surgeon who disinfects himself well, can immediately, after making a post-mortem examination, undertake any operation known to surgery. Every morning, from six to eight, during the summer I am obliged to give the students operations on the cadaver; and from ten to three I am busy in the hospital, operating and dressing wounds. I have never yet infected a patient. In the winter I have no operations on the cadaver. Comparing my results in the clinic, I can assure you that the mortality in summer is not greater than in winter." Says Esmarch: "If you have thoroughly disinfected yourself, you can immediatetely enter upon obstetric practice. Time does not destroy septic dirt."—*Medical News.*

HERPES OF THE THROAT.

By SOLOMON SOLIS-COHEN, A.M., M.D.,

SENIOR CLINICAL ASSISTANT AT THE THROAT DEPARTMENT OF THE PHILADELPHIA POLYCLINIC.

MR. W——, aged forty-five, presented himself at my class at the Philadelphia Polyclinic on May 29th. "He had been troubled," to use his own words, "for fifteen years with something that comes down in the throat and bursts. Sometimes it gets ulcered." It was a source of annoyance to him, causing unpleasant sensations of discomfort, heat, and dryness, and rendering speech and deglutition somewhat painful. This was his fourth or fifth visit to the clinic, but it was the first occasion upon which I had been able to see for myself the phenomena he so vaguely described. A somewhat close questioning of the patient had given me an inkling as to the true nature of the case; but as these instances are so infrequently met with, ocular demonstration is necessary to a positive diagnosis. Upon illumining the patient's mouth and throat by a strong light, a few scattered vesicles were noticed upon the soft palate, most of them of pin-head size, but one equal in size to three others. When the larger vesicle was punctured a drop or two of liquid escaped, and the walls of the vesicle collapsed. The case was, therefore, a genuine one of herpes of the palate, and was of extremely chronic nature. From the patient's manner and speech there could be no hesitation in classing him among those of decidedly neurotic temperament.

Chronic herpes of the throat occurs in this class of individuals, and is also occasionally found associated with a strumous or tuberculous diathesis, being then particularly obstinate. The initial manifestations of the disease are rarely seen. At first one or more minute papules are developed, isolated or in groups, upon the mucous membrane of the palate, of the tonsils, and exceptionally of the pharynx. Vacuolation of the superficial epithelium taking place, the papules are replaced by vesicles. These vesicles sometimes disappear by reabsorption of their contents. Usually, however, they soon rupture, leaving small superficial ulcers, which in some instances heal without a trace. As a rule, the ulcers become covered with fibrinous exudation, and, repair taking place beneath the exudation, it becomes disintegrated and detached, and no mark of the lesion is left. The patient remains free from annoyance for variable intervals—in this case a few days to three or four weeks—when the process is again repeated.

The acute form of the disease is not at all uncommon, but is often unrecognized. The vesicles are surrounded by an inflammatory areola. There is often decided pyrexia. Odynphagia is sometimes quite severe, the soreness of the throat and the local heat and dryness being more marked than in ordinary pharyngitis or tonsillitis. In some instances the attack is preceded by malaise and accompanied by depression.

I believe that many so-called mild cases of diphtheria are of this nature, and that the vaunting of indifferent remedies for diphtheria is not rarely due to the fact that during their exhibition cases of herpetic sore throat have recovered. The coalescence of several patches of exudation upon the surface of the vesicular ulcers gives rise to limited sheets of false membrane, apt to deceive the uninformed or careless observer.

Rarely, indeed, is a case of acute herpes of the throat seen in the papular or vesicular stage, and the diagnosis must be based upon the absence of the constitutional symptoms of diphtheria, the absence of glandular enlargement, the superficial character of the exudation, and its circumscribed location upon palate or tonsils. Some observers refer to the presence among the patches of exudation of small ulcers, such as ordinarily follow the rupture of the vesicles, or the appearance in isolated situations of small spots of false membrane, which indicate by their circular shape the previous existence of a vesicle, and by their transparency the recency of their formation.

In a case of acute herpetic tonsillitis which I had the opportunity of observing, the exudation presented, upon my first visit, as a number of scattered circular patches upon both tonsils. Upon the second visit, the tonsils appeared to be completely sheathed in a uniform false membrane. This is the only case I have seen at so early a stage. Sometimes herpes of the skin, of the lips, or of other mucous surfaces, co-exists with the throat affection. In some cases the differentiation from diphtheria is impossible even by the most experienced observer. Obviously the safest plan in such a case would be to treat as for the graver malady. The treatment of an undoubted case of herpetic sore throat is to be conducted on the principles applicable to inflammation of the mucous membranes of the throat in general. Rest, regulation of the diet, the administration of mild febrifuge and anodyne mixtures, with sedative inhalations when indicated by pain, may be supplemented during the detachment of the exudation by sprays of antiseptic and detergent solutions. Should a tendency toward phagedena become manifest, or genuine diphtheritic phenomena become superimposed, it will be necessary to employ more active measures appropriate to these conditions. The treatment of chronic cases consists in local applications, daily or every other day, of the dilute acids, and in the internal administration of such remedies as are indicated by the special diathesis of the patient; giving due attention to the regulation of his diet, the correction of any errors of habit, and the improvement of his general hygienic surroundings. Preparations of cinchona, of nux vomica, of arsenic, and of iron may be prescribed with advantage. In those of neurotic tendencies opium is said to have a specially beneficial action. As the stimulant rather than the sedative effects of the drugs are desired the doses must be small.

Clinical Department.

AN IMPROVED FRACTURE-BOX.

Dr. S. Bradbury, of Oldtown, Me., sends us a photograph representing the "box and railway" devised by himself for the treatment of compound fracture of the leg. The box is the ordinary fracture-box of every-day use, but the improvement consists in mounting it upon four grooved wheels riding upon two rails. He writes: "I have just removed the apparatus from a patient who had a compound comminuted fracture of the middle and lower third of the left leg, and I believe it the best apparatus for this kind of injury which we possess. The railway is screwed to the cross-bar at the foot of the bed, and rests upon a good hair-mattress. The leg is placed in the box, and imbedded in bran, which is retained in its place by a piece of sheeting laid in the box. The great advantage of the railway is that it prevents the ends of the upper and lower fragments from being crowded together by any movements of the patient during sleep. If the patient moves up or down, the box slides with the leg, and no harm is done. The attendants of the patient above referred to told me that this would often happen while he was asleep, the trucks riding to and fro over the rails without the least disturbance to the position of the leg in the fracture-box."

RHINOLITHS.

Dr. R. E. Beach, of Vandalia, Ill., writes that his attention was called recently to an article on this subject, by Dr. J. S. Bettman, in the *Journal of the American Medical Association*, and he was led thereby to send a report of two cases occurring in his own practice. Some twelve years ago a child was brought to him for advice concerning a catarrhal affection of the nose which had existed for eight months. The Doctor's suspicions having been aroused by the fact that the right side only was affected, he made a careful examination, and discovered a foreign body resting upon the middle turbinated bone. It was dislodged by slight traction with the forceps, and was found to be a rhinolith having a small seed for a nucleus. The second case was that of a little girl, four years of age, who had been suffering from a nasal catarrh for about eighteen months. The father asserted positively that the child had never introduced anything into the nose. Inspection showed an object lying on the floor of the right nasal fossa near the posterior termination of the inferior turbinated bone. The mucous membrane was much swollen, and covered completely the upper portion of the foreign body. The latter was slightly movable, and was supposed to be a detached sequestrum. Its removal being determined upon, the child was placed under chloroform, and the object was withdrawn by a hawk-bill forceps. It was found to be a calcareous body of oblong shape, three-fourths of an inch in its longest and one-half inch in its shortest diameter, and containing a cherry-pit as a nucleus. Dr. Beach says that he can recall numerous instances of the introduction of foreign bodies into the nostrils, and he insists upon the necessity of a careful and thorough examination of the nasal cavities in every case of catarrhal affection, especially when occurring in children.

ACUTE ALBUMINURIA OF POSSIBLY TRAUMATIC ORIGIN.

Dr. Walter F. Morgan writes that he was recently in attendance upon a boy, seven years of age, and had considerable difficulty in making a diagnosis until an analysis of the urine revealed the presence of fifty per cent. by volume of albumen. This condition had not been preceded by any of the specific fevers or other of the generally recognized causes of acute Bright's disease in children. "Possibly it may have been due to a fall upon the back, which the patient had had about a month before. The fall had been succeeded by a gradual deterioration in health, with great disturbance of the heart's action, convulsions, and cyanosis. During the convulsive attacks the heart-beats were irregular and about forty to the minute. An unfavorable prognosis had been given, but after a month of close attendance Dr. Phillips and myself had the pleasure of seeing convalescence begin. Diplopia and incoördination of the muscles of locomotion persisted for several weeks, but the patient is now in perfect health."

SALICYLATE OF IRON IN RHEUMATISM.

Dr. C. C. Duffy, of 263 West Fifty-fourth Street, writes to call attention to the value of salicylate of iron in the treatment of rheumatism, particularly when occurring in the subacute form. The impoverishment of the blood, so commonly occurring in the later stages of an attack of rheumatism, is to be attributed, he believes, not only to the disease itself, but also, when salicylic acid is exhibited, to the action of this substance upon the iron of the blood. He was in the habit, for a time, of prescribing some form of iron in alternation with salicylate of sodium, but met with no signal success. He then determined to exhibit the remedies in combination and has had most satisfactory results. He uses a mixture each dessertspoonful of which contains eight grains of salicylic acid, four grains of sodium salicylate, and one grain of ferrous malate. This is the usual dose, though sometimes even double the quantity is given. Dr. Duffy relates two cases of a number in which he has used salicylate of iron. The first case was that of an engineer, twenty-six years of age, suffering from an acute attack of rheumatism, involving both knees and ankles and the left elbow. The salicylate of iron mixture was given in dessertspoonful doses every four hours, and at the end of three days the patient was able to return to his busi-

ness and has remained well. The second case was one of an acute exacerbation of chronic rheumatism occurring in a domestic, twenty-two years of age. She had had her first attack some three years previously, and for the past six or eight months had never been free from pain, though able to perform her ordinary duties most of the time. The salicylate of iron mixture was given in the usual dose four times a day. At the expiration of about a month she was entirely relieved. In neither of these cases were any local applications made to the affected joints, nor were any other remedies employed. In a number of other cases a similar treatment was followed by equally good results, and in no instance was it necessary to resort to any other medication.

STRETCHING OF THE SCIATIC NERVE FOR SCIATICA.

Dr. Fraser C. Fuller, of this city, reports a successful case of sciatic-nerve stretching for sciatica. The disease was probably perineuritis, and for its relief the patient had been subjected to almost every known means of treatment. He was a man aged fifty, naturally strong and robust, but had become greatly reduced in strength and flesh. His sufferings were so intense that he was unable to sit at the table sufficiently long to take proper nourishment. The operation was performed November 16, 1884. The incision over the sciatic was made in the lower portion of the thigh, and the nerve readily found. Very slight tension, as compared with other cases, sufficed to give the sensation indicating that sufficient traction had been produced. The pain ceased immediately after the operation. Unfortunately, primary union was not obtained, and some suppuration ensued, perhaps explainable by the patient's low grade of vitality. A slight recurrence of the pain took place, but was cut short by the use of the Paquelin cautery. He has now been free from pain five months, and has increased over thirty pounds in weight. There appears to be a permanent condition of anæsthesia and numbness in the calf of the leg, probably due to rupture of the nerve-filaments, but it causes no inconvenience.

A NEW TREATMENT FOR VESICO-VAGINAL FISTULA.

Dr. B. Ruppe, of New York, recently read a paper before the Medico-Chirurgical Society of German Physicians, in which he described the circumstances which led him to the discovery of a novel method of treatment of this condition. He had been hastily summoned to attend a primipara, thirty-four years of age, who was in labor. She had had a severe chill and high fever the night before, and labor had commenced and the bag of waters had ruptured previous to his arrival. The pains were sluggish, and the presenting part could be felt only with the greatest difficulty. It was not until the following day that the pains returned with sufficient force to bring the head within reach, when the forceps were applied and the woman was delivered of a dead child. More notice was then taken of the other symptoms, and it was found that the woman was suffering from typhoid fever; and three days later it was discovered that she also had a vesico-vaginal fistula of sufficient size to permit of the introduction of the index-finger into the bladder. Dr. Loewe saw the case at this time, and it was determined to operate by Marion Sims' method after the patient had recovered from the typhoid fever. The patient being wretchedly poor and unable to provide the linen necessary for cleanliness, it became a problem how to obviate the irritation and other evil consequences following the constant dribbling of urine. Finally a large wash-tub was procured and provided with three pillows—one for the back, one for the knee-bend, and the third to sit upon.

The patient was placed in the tub, which was then filled with lukewarm water. The walls of the vagina were kept apart by means of a wire speculum. By means of this arrangement all the indications were fulfilled—the urine was prevented from irritating the parts, and the general temperature was brought under control by the bath. To the water, which was frequently renewed, was added at first an infusion of chamomile, but subsequently an oak-bark infusion was employed. The patient remained in the bath twenty-one days. During the third week, the patient frequently said that she had an inclination to urinate, and an examination the day after her removal from the tub revealed the fact that no fistula was present. Dr. Loewe appeared at the appointed time to assist at the operation, but was astonished to find nothing to operate upon.

"In the majority of cases," Dr. Ruppe says, "it would not be necessary to keep the patient in the bath longer than a week."

The method is especially applicable in cases in which an operation is contra-indicated, or in which it has been performed without success, or it might be employed in conjunction with the silver-suture method.

THE IMMEDIATE OPERATION FOR PARTIAL RUPTURE OF THE PERINEUM.

Dr. D. L. Gaillard, of Greenville, Tex., writes that, according to his experience, the chief cause of failure in the immediate operation for rupture of the perineum lies in the swollen condition of the parts immediately after parturition. The sutures are inserted and drawn as tight as the state of the tissues will permit, but in a short time they become loose, and apposition is not maintained. He relates a case in which this occurred, and in which he repaired the fault by a simple procedure. The patient was a primipara who had sustained an extensive lacerated rupture of the perineum. As soon as possible after delivery chloroform was given, and the edges of the wound were drawn into close apposition by quill sutures. The bladder was emptied by the catheter, and opium was given to prevent movement of the bowels. On the fourth day the swelling was so reduced that water, used in injection, together with the lochial discharge escaped between the lips of the laceration. Having prepared several little square pieces of lead, cut on one surface so as to form a clamp, Dr. Gaillard proceeded to tighten the sutures. Drawing the suture as tight as possible with one hand, the clamp, held in the teeth of a pair of pincers, was passed over the thread and held close to the quill. Then, when all the slack of the suture had been taken up, the lead was clamped. In this way the edges of the wound were again drawn into close apposition without disturbing the parts in any way. The parts had shrunken to such a degree that the sutures were shortened nearly an inch. The patient suffered subsequently from cystitis excited by the catheterization, but the wound healed readily without any further trouble. The writer does not favor silver sutures, but prefers the quill suture, as it is possible to draw it tight when required and thus keep the lips of the laceration together.

Fruit, Wine, and Tea.—In his recent Lettsomian lectures on Indigestion, Dr. Lauder Brunton declares acid fruit to be indigestible and apt to cause intestinal irritation. He believes sour wines to be peculiarly liable to cause indigestion, and, when taken regularly, to cause gastric catarrh. The tannin in tea interferes very considerably with the digestion of fresh meat, though such is not the case with dried meat, such as ham or tongue. Tea at breakfast is not apt to produce gastric disorders, but afternoon teas are pronounced bad. Infusions of tea should be "light drawn" and drained from the leaves before serving, as by this means only a small portion of the tannin becomes dissolved in it.—*British Medical and Surgical Journal.*

Progress of Medical Science.

THE TREATMENT OF MIGRAINE.—Dr. Clifford Allbutt has found two drugs useful in the treatment of migraine. The first is guarana, given in two or three doses at short intervals. This is applicable to those cases which begin with some slight warning in the early day. Croton chloral is the other drug; this should be given in repeated doses until twenty grains in all have been taken. As migraine is a disorder that originates in childhood, the hope of a cure must be based upon a healthful life, a healthful growth, and a healthful education. With regard to tonics a combination of bromides with quinine has answered best; then come cannabis indica and ergot, and after these chloride of ammonium. The well-known fact that ocular anomalies may cause migraine is also duly emphasized by Allbutt.

TREATMENT OF ACUTE EPIDIDYMITIS WITH FULLER'S-EARTH.—This substance was recommended some time ago by Professor Botkin, of St. Petersburg, in the treatment of aneurism, and of certain peripheral neuroses, and more recently Dr. Lukashevitch has employed it with success in the treatment of acute epididymitis. He makes the earth into a paste with water and applies it, spread upon cloth, to the inflamed testicle. It is necessary to renew the application two or three times in the twenty-four hours, and they are to be continued for from four to six days. Their almost constant effect was an alleviation of the pain within a few minutes, and at the end of two or three days the swelling began to diminish. The author attributes the good results obtained to the metallo-therapeutic properties of the clay, but it is not improbable that the cure was due to the constant moisture and pressure of the application rather than to any therapeutic properties residing in the substance itself.—*Gazzetta Medica di Roma*, April 1, 1885.

THE CUMULATIVE ACTION OF DIGITALIS AND HELLEBORE.—Dr. Van der Heide has recently undertaken a series of experimental investigations touching this much studied but yet imperfectly understood topic (*The Therapeutic Gazette*, May 15, 1885). In all cases in which digitaline and helleboreine were given in small or large doses, either subcutaneously or by the stomach, the following secondary appearances, lasting for as long as four weeks after the cessation of the administration of the drug, were observed: First, the pulse was in all cases slowed, only returning to normal after numerous fluctuations; second, irregularity of the pulse, which was more marked as an after-effect in those cases in which irregularity was a prominent symptom during the administration of the drug. When uniform doses were given for some time, in no case did the most powerful action on the heart occur after the first dose, and when the dose was gradually increased, the action on the heart became intensified, but without definite relationship to the increase of the dose; so that when the doses were rapidly increased, the effect is not as marked as would be expected from the size of the dose. From this it is clear that the action of digitaline and helleboreine on the heart is not a true cumulative one, but rather the heart becomes accustomed to the drug. The remarkable fact was further noticed by the author that when the administration of the drug is commenced with small doses, and these gradually increased, nervous disturbances are in nearly all cases observed, usually after the third or fourth dose has been administered. These symptoms last only one or two days, and then disappear, even if the drug is given continuously ir the same doses, thus showing that the nervous system can also accommodate itself to the action of this drug. So, although this action is at first a true cumulative one, the nervous system rapidly becomes accustomed to the drug, even in a more marked degree than is the case with the circulation. We see, therefore, that while many facts determined by the author point to a cumulative action of these drugs, symptoms pointing to an accommodation of the organism are quite as marked. The following applications of these and other facts detailed by the author may be made as regards the employment of the drugs under consideration. It is better to give digitalis at intervals of twenty-four hours, and in small doses, rather than with smaller intervals and larger doses. Even when symptoms of cumulative action appear after prolonged use of digitaline or helleboreine, there is no great danger of a fatal or even serious result; for in all the author's experiments the toxic phenomena disappeared even during the continuation of the use of the drug. When, however, after the first day of the use of these drugs, no action appears on the heart, great care must be observed in the continuance of their use, since a further administration of the drug can produce the most dangerous symptoms or even death; thus in the author's experiments, in which death followed a small dose, no action appeared on the heart until the very time and occurrence of death. As regards the therapeutical value of helleboreine little is known, though that little seems to prove an absence of all useful properties in the treatment of heart diseases.

THE CLINICAL PATHOLOGY OF CHOREA.—Dr. H. C. Wood, in the *Therapeutic Gazette*, May 15, 1885, publishes a clinical study of chorea, from which we extract the following points: "Precisely as at one time paralysis was supposed to be a disease, so at a later period was chorea believed to be a distinct affection. Indeed, many of the profession still use the term as though it were the name of a distinct ailment, and most of the treatises upon nervous diseases have a chapter upon chorea as a separate affection. It is, however, perfectly clear that the word should be employed as analogous to, or having equal rank with, paralysis or tremor. The term choreic movements is unnecessary; or, if it still be used, the term chorea should be considered to represent that condition in which choreic movements occur." There can no longer be any doubt that in acute human chorea alterations of the spinal ganglionic cells frequently exist. Dr. Wood says: "I do not mean to assert that an appreciable lesion of the spinal cells is always to be found in St. Vitus' dance; indeed, I am quite confident that the disease may prove fatal without such lesion. Nevertheless, I am well assured that such alterations are very frequent in fatal cases, and have in not a few instances been overlooked, because not appreciated and sought for. The marked tendency of the choreic movements to affect one side of the body, or one limb, has led many observers to confine their careful examinations to the brain, this hemi- or monoplegic tendency being believed to show that the movements originate in the brain and not in the spinal cord. A clinical study of the various human affections of the motor ganglia of the cord shows, however, that in such disorders spinal monoplegias are not at all uncommon, and that in some cases hemiplegias may be seen. In many cases of chorea of the dog this localization of the movements in one limb or in one side of the body is quite pronounced; indeed, this was the case in dogs in which I positively determined the spinal cord to be the seat of the lesion: it cannot, therefore, be considered that a hemiplegic, much less that a monoplegic, chorea is necessarily of brain origin." According to the evidence adduced by the author, "choreic movements in the child, as in the dog, may originate from a diseased condition of the ganglionic spinal cell. Further, as a diseased condition of the spinal ganglionic cells has been found in several cases of human chorea, it must be allowed that such diseased state is at least one of the fundamental pathological alterations of human chorea. It is perfectly clear, on the other hand, that the disorder is not confined to these multipolar cells. The researches of Dr. Putnam, already quoted, show that in the cat alterations may be found, at least in some cases, in the brain ganglionic cells, and every clinician knows that the cerebral functions are often profoundly affected in the

choreic child. The will, the intellectual and the emotional faculties are all prone to show the presence of an abnormal influence in chorea, and it seems, therefore, that we must consider that in the choreic child the ganglionic cells in the whole cerebro-spinal system suffer, and that this alteration is the base of the disease; or, in other words, the morbid pathology of chorea, or St. Vitus' dance of childhood, may be said to be a diseased condition of the ganglionic structures of the cerebro-spinal axis, which abnormal state may exist without alterations of structure sufficient to be determined by the microscope, or may go on until it is accompanied with marked structural lesions. Further, this condition must be looked upon as one of lowered tone, and it must be allowed that it may be produced by various causes, but is little prone to occur in persons of robust nervous system. The vital choreic depression of the nerve-cells may be the result of emotional disturbance, as in the chorea produced by fright. It may be the result of the influence of the rheumatic diathesis or poison upon the affected tissues. It may be the result of the partial occlusion of the circulation by cerebral capillary thrombosis or embolism, and there are probably other efficient causes in its production. The course of a chorea, as well as the severity of the symptoms, very naturally depends upon the cause of the abnormal condition, and hence we have the varieties so plainly marked in this so-called disease."

Multiple Myoclonus.—By this term Friedreich designates an affection which he observed in a lady fifty years of age. It consisted in clonic convulsive attacks occurring at irregular intervals in certain symmetrical muscular groups. The flexors and extensors of the forearms and legs were chiefly affected. The convulsions persisted during sleep, and were exaggerated by irritation of the skin. They were absent during voluntary movements. After existing for five years the affection disappeared spontaneously in the space of ten days. Friedreich believed that it was to be referred to a functional disturbance of the anterior ganglion cells of the cord.—*Rivista Clinica e Terapeutica*, May, 1885.

The Action of the Alkaloids of Quebracho Bark.—According to Harnack and Hoffmann (*The London Medical Record*, May 15, 1885), six alkaloids have been obtained from the bark of the aspidosperma quebracho. Four of these are crystalline—viz., aspidospermine, quebrachine, which presents the most beautiful crystals, quebrachamine, and aspidospermatine; and two amorphous—aspidosamine and hypoquebrachine. All these alkaloids produce in frogs respiratory paralysis, probably in consequence of annihilating the excitability of the respiratory innervation. Quebrachine acts in like manner most intensely on the respiratory centres of the mammalia; aspidospermine, however, in a less degree. They paralyze the central nervous system in frogs, gradually arresting the voluntary, and later, also, the reflex motion. Aspidosamine, when given subcutaneously in not too minute doses, brings on vomiting in mammalia, probably by its action on the corresponding nervous centres. The other preparations merely produce violent nausea. All these alkaloids also call forth symptoms of central irritation of the medulla oblongata. Paralysis of the peripheral terminations of the motor nerves has only been exclusively observed as the effect of aspidosamine and hypoquebrachine, but never of the other alkaloids. All the bases of quebracho produce in frogs direct paralysis of the striped muscles; in mammalia, however, a direct influence on muscular irritability could not be proved. In frogs, the heart also participates in the general paralysis of the striped muscles, which is likely to be preceded by paralysis of its motor ganglia. The arrest of the action of the heart, however, in every instance takes place after complete cessation of the respiration; in mammalia, this effect on the action of the heart is less striking. Of all these alkaloids, quebrachine is the most powerful in its effects, next to it ranks aspidosamine, whilst aspidospermine is the weakest. Although the emetic properties of aspidosamine somewhat resemble those of apomorphia, their dissimilarities are of the greatest importance in their therapeutic bearing. A subcutaneous injection of apomorphia is a less energetic emetic, but it acts as a most violent irritant on some portions of the brain, and especially on the respiratory centres. The greatest therapeutic value of quebracho bark consists in its property of reducing the irritability of the respiratory centre. It will prove beneficial in cases of dyspnœa not depending on impeded aëration—*i.e.*, on insufficient oxidation of the blood in the lungs, and not being a mere compensatory symptom; namely, in dyspnœa, in consequence of disorders of circulation and of diseases of the heart. In other cases, in which the dyspnœa constitutes a purely compensatory manifestation, any attempt at lessening the irritability of the respiratory centres may, under certain circumstances, be fraught with danger, although this remedy may even then occasionally assist in alleviating this distressing symptom. This effect is produced by all the alkaloids of the bark; but quebrachine and aspidosamine deserve the preference, especially the first, the emetic action of a subcutaneous injection of which acts most speedily and energetically. Hydrochlorate of quebrachine is given both internally and subcutaneously in doses from five-sixths of a grain to one grain and a half.

Hiccough Cured by the Extraction of Nine Needles from the Epigastrium.—Liégeois has described in the *Revue Méd. de l'Est* (January 4, 1885) a case of intractable hiccough in a nervous woman, aged twenty-one. The paroxysm lasted twenty-four days, and was so violent that the whole body was shaken, and the noise could be heard at a distance of forty yards. Bromide of potassium and ether had been given without success. Chloral and hyoscyamine produced a temporary improvement, but the paroxysms reappeared after a time. Opium and atropia were then administered, and the hiccough ceased for about a month, when a new attack occurred. Five months later, a small abscess formed in the epigastric region, and a needle, which projected through the skin, was extracted by the patient's sister. An incision was then made by Dr. Liégeois, who found eight other needles in the subcutaneous tissue. This operation was followed by a complete cure, but the author is unable to state whether the needles had been swallowed or introduced under the skin by the patient herself.

The Tendon Reflex in Glycosuria.—Professor S. Rosenstein has made a number of observations concerning the condition of the patellar tendon reflex in cases of diabetes mellitus, from a study of which he comes to the following conclusions (*Allgemeine Medicinische Central-Zeitung*, No. 28, 1885): 1. In a certain number of cases of glycosuria the patellar reflex is permanently abolished, and is not restored, as happens in chronic alcoholism, by the subcutaneous use of strychnine. 2. The abolition of the reflex does not depend upon relative proportion of sugar, or of acetone, nor upon the presence of substances in the urine reducible by the chloride of iron test; and it cannot, therefore, be regarded as a toxic symptom. 3. It is likewise independent of the general nutritive conditions of the body and of the patient's strength, and cannot therefore be due to weakness. 4. The disturbance of the reflex process between the crural nerve and the lumbar cord is, as far as can be determined by one autopsy, purely functional, and is not due to any organic change in the cord. As regards the prognostic value of this symptom, the author does not agree with Bouchard, that it is of very grave import. He also regards it as of slight diagnostic value in comatose conditions, as he has found the patellar reflex absent in uræmic as well as in diabetic coma.

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THE PROPOSED INTERNATIONAL MEDICAL CONGRESS.

FROM any point the present prospects of a successful International Medical Congress in 1887 are discouraging. It is true that the appointment and action of the New Orleans Committee have been accepted as technically correct, and their revision of the preliminary organization has been promulgated. So far the skies have been cleared and progress has been made. But this progress has only led into further difficulties. For, though the new committee have met and done the work of decapitation and redistribution laid out for them, they have in so doing already created so much bitterness and opposition as seriously to raise the question whether all their efforts at securing international co-operation will not be paralyzed.

In considering the basis of this opposition, the existence of which is so regrettable, two facts stand broadly out, viz.—that the Congress had been satisfactorily and legally organized, and was progressing smoothly, and that then certain men stepped in, not all with motives above suspicion, and instigated the changes resulting in the present troubles. These changes introduced questions of medical politics and geography, of no international or scientific interest, and involved the removal and humiliation of some of the best and most representative physicians in this and other States. It is natural that some feeling is created, while the general verdict can not but be that the action was most unwise.

The justice of the introduction of the question of geography will bear discussion. The East would, we believe, have cheerfully conceded all that was desired; but the introduction of the dead and wearisome Code issue was a most deplorable and irretrievable mistake, a mistake begotten of cretinous prejudice and of a stupid, short-sighted provincialism, which it is painful to have to confess the existence of in our country and profession. This action of the Association can be justified by no reason or argument, and the superlative folly of it is quite beyond the reach of adequate characterization. The only plea put forward is that of a ridiculous and irrelevant "consistency"—a consistency of which the great philosopher of Concord must have had some prophetic inkling when he wrote: "A foolish regard for consistency is the hobgoblin of little minds." All this exhibition of obtuseness and folly is the more exasperating to those who, as we have done, have sincerely desired the success of the Congress, and on this ground alone have wished that politics should be left out.

But beyond all these questions it seems that the treatment of the original committee and its work has caused the withdrawal of many of the best men of Philadelphia, including some prominent officers of the Congress. We regret to learn, also, that the example in Philadelphia will probably be followed in other cities.

Notwithstanding these dark clouds upon the horizon, we might expect little actually to come from them, were it not for the unfortunate fact that it is so much easier to prevent a Congress from being international than to make it so. Our foreign colleagues can only come here in any event at much trouble and expense. They will not come if there is a split and a quarrel, more especially if they see that this takes away from the meetings many of the men whom they would most like to see. They care nothing about squabbles over medical etiquette, and will be disgusted, we fear, to learn that such a thing has been introduced into a scientific body, in order that a few gentlemen who "run" the American Medical Association may be "consistent."

The facts, then, are that there has sprung up a serious and aggressive opposition to the present organization and policy of management of the International Medical Congress; and the matter comes to this: Will these gentlemen who have been thrust aside by the new committee be persuaded to submit peacefully and patriotically to a rule which they do not respect, and join hands to make a successful Congress? Or can not some concessions and compromises yet be made?

Certainly, unless one of these things is done, the international as well as the national character of the Congress is seriously endangered. We earnestly trust that matters may not be driven to an extreme issue, and that some arrangement for securing harmony may yet be perfected.

THE FAILURE OF CIVIL SERVICE IN MEDICAL APPOINTMENTS.

POLITICS has been defined as "the science of putting the ins out and the outs in." Its laws have never been very clearly differentiated, and they have of late received a new disturbing factor in the shape of Civil Service reform. This subject is now occupying the minds of men, of the politician especially. The daily press has teemed with articles on the relations of this reform to the various classes of the community, except to the medical profession. Certain recent developments have raised the query as to what these latter relations really are. We refer to the recent appointment of sanitary inspectors for the summer corps of the Health Board.

Early in February an examination was held for medical positions under the City Government. Thirty-nine men competed, and of these twenty-eight received the seventy per cent. required for passing. In this examination due regard was paid to previous experience in medical work, and to the ability of candidates in speaking French and German (see THE MEDICAL RECORD, February 28, 1885). The criticism was made that the questions upon medical topics were in many instances unpractical. This criticism could not, however, be brought against the questions given in a second examina-

tion held early in June. In this second examination about one hundred and ten competed and eighty passed, but of this number one half stood as low as seventy-five per cent., or only five per cent above the minimum allowed. Thus, altogether, one hundred and eight men had met the requirements of the Civil Service examiners, and their names were sent to the Health Board. At this juncture, however, and in the hands of the latter authorities, the spirit of Civil Service reform experienced a sudden check.

In our former article, above referred to, it was stated that the "weak point of the present system in this city is that when openings occur in any department, the three highest on the list are sent in for each vacancy, but the appointing power is not obliged to select from this number, and can have repeated names sent in, in classes of three, until a selection is made. In this way it is possible for any one standing quite low on the list, but having strong political influence, to obtain an office." This weakness has been glaringly illustrated in the appointment of the corps for the present summer. That the gentlemen chosen passed the examination no one can deny. That they will perform their duties faithfully there is no reason to doubt; but they were not chosen in accordance with the spirit of Civil Service. They were not, in the great majority of cases, those who had most ably responded to the test of the Civil Service examiners themselves. The City Government made a standard, and then repudiated it.

In the second list, with eighty names, the man ranking first was passed over; the man ranking seventy-sixth was chosen, simply because he had stronger political backing. Other instances were just as flagrant. It may be said that several of the successful men had had previous experience on the corps. Presumably this experience was credited to them, and yet even with this prestige they were not, in the opinion of the examiner himself, qualified to head the list.

This is not the spirit of our Civil Service laws. It is simply a perpetuation of the old "influence" system under a different phase. The appointments were in many instances the payment of political debts to those signing the credentials. It was frankly stated at the office of the Health Department that the Board rarely considered a man's examination standing, and that his appointment depended on the amount of "pressure" he could bring to bear upon those in power. This admission is at least frank, and shows just what estimate the Health authorities place upon the present Civil Service law. The statements we have made are facts. They can be verified by inspecting the official records of the city. With no disrespect to the gentlemen whose political backing has allowed them to crowd out those who better responded to the required test, we characterize the present Civil Service of the Health Board as a broad farce.

IMPROPER ADMINISTRATION OF OPIUM.

CONSIDERING that nearly all the drugs of the Pharmacopœia which in small doses are capable of producing beneficent results, are, in large doses, capable of destroying life; and considering, also, the amount of medicine-prescribing and medicine-taking which daily takes place in the United States, discriminate and indiscriminate, it is really a marvel that a greater number of serious mishaps do not occur.

It is exceedingly rare for a physician to be brought to the bar of justice to answer the charge of manslaughter because he has carelessly administered a fatal dose of morphine to a patient; but could those physicians who have rendered their patients victims to the living death of an opium-eater be summoned to answer this serious charge, there would be a large assembly. In this array the number of country physicians would not be small. The mischief done by these men is seldom realized by themselves. The enormity of their unconscious guilt is more often manifest to city physicians, hospital and other, whose wide reputation brings the rural sufferers to them, as the last resort, for relief. It is then too often found that the remedy has proved worse than the disease, and that morphine and opium pains are what are making the patient wretched; and the cure depends upon the possibility of curing the opium habit.

The temptation of the country physician to give opium in some form is very great. His patients are scattered over a wide territory. The only visit he can make in the day must be one which will bring relief, sure and speedy, to his patient. He has no time to try if less potent medicines will prove of avail; therefore he prescribes opium.

In some instances the physician himself is a slave to the insinuating drug, and prescribes it to his patients, prompted by that feeling which opium begets of liking to share its pleasures.

Another class of physicians who administer opium are those young in the profession, who wish to impress their clients with their power and skill by producing prompt results.

Could a strict justice overtake those physicians who, by an uncalled-for use of opium, introduce to the dreadful habit those who are made slaves for life, a burden to themselves and friends, it would possibly bring about a state of affairs in which such an event would be of as rare an occurrence as the administration of a promptly fatal dose. Unfortunately we can see no way in which this can be brought about.

SUCCESSFUL TREATMENT OF HAY FEVER.[1]

IF a successful treatment of hay fever has been discovered it will be a great boon to those weeping, wheezing, afflicted sufferers, who in the time of roses and new-mown hay, or when the pollen of insignificant weeds pervades the air, are obliged to travel to certain regions to find relief.

These unhappy individuals, according to Dr. Sajous, possess "as a result of heredity or of diseases implicating markedly the nervous system, nerve-centres which have become abnormally sensitive and are therefore inordinately influenced by the external elements to which they respond."

As a result of local disease the nasal mucous membrane becomes hyperæsthetic and transmits to the abnormally sensitive nerve-centres the impressions made

[1] Hay Fever and its Successful Treatment. By Charles E. Sajous, M.D. Philadelphia: F. A. Davis, Publisher. 1885.

by the "external elements" (pollen, etc.), which results in a paroxysm of "hay fever."

These are the three conditions necessary for a paroxysm, and when one is absent, as is the case with the external visitants a portion of the year, and all the year in certain regions, it will not take place. Hence to cure the disease is to render the hyperæsthetic nasal membrane oblivious to the annual visitation of the external cause. The writer maintains that this can be done by cauterizing the hyperæsthetic portions of the nasal membrane, which he has accomplished with pleasing and permanent results by means of the galvano-cautery or acids.

He describes these hyperæsthetic areas as consisting of three—posterior, middle, and anterior. The posterior area is implicated when reflex asthma is the most prominent symptom; the anterior when the head symptoms alone are present; the middle is the starting-point of all the symptoms combined.

He recommends that abnormal conditions of the nasal cavities, such as hypertrophies, polypi, exostoses, etc., be eradicated before using the superficial cauterization. The best results are obtained by instituting treatment six weeks at least before the onset of a paroxysm, though it may be conducted during a paroxysm resulting sometimes in an arrest of it or a beneficial modification. Immunity depends on the thoroughness with which the treatment is conducted.

It would seem from the perusal of Dr. Sajous' monograph on the subject that the hay fever might become unknown, provided its victims would put their hyperæsthetic nasal membranes under the treatment of an adept in rhinology. The banishment of hay fever from the list of diseases would be a boon to all except the hotel-keepers of those resorts where, since the "external irritant" does not lurk in the atmosphere, the cause is removed and a cure is effected.

With the mechanism of the disease still in mind there remains one other method, which will be as much superior to that advanced by Dr. Sajous, as his is better than the now prevailing method of changing abode, namely, that of finding a remedy which will act directly upon the abnormally sensitive nerve-centres. We commend this to investigators.

SIR SPENCER WELLS AND OVARIOTOMY.

Exception has been taken by a Western journal to what was said in a recent Record editorial concerning the relation of Sir Spencer Wells to the revival of ovariotomy. The claim is made that to Washington L. Atlee, of Pennsylvania, is due the position which the English surgeon has "arrogated."

The history of nearly all surgical operations emphasizes the fact that they are rarely the product of the genius of any one man. Each age, dating back to the birth of medical literature, with its consequent dissemination of ideas, has suggested some valuable theory which later times have put in practice. The process has been one of evolution. In many directions the highest type has not yet been reached. Perhaps no operation more clearly illustrates this idea than that of ovariotomy. Nearly two hundred years ago it began to be seriously talked of, but after a century and a half it still had many more enemies than friends. During this period isolated contributions were made concerning our knowledge in "condition, indication, and operative technique." Men were at work in England, and later in America, each generation profiting by the experience of its predecessor, and advances were made step by step toward the goal of demonstration. In the category of contributors toward this end, both Atlee and Wells occupy enviable positions. The impulse given to the development of the operation by the Atlee brothers is very justly, we think, ascribed by Dr. Emmet (last edition) to Dr. Charles Clay, of Manchester. The statement of Carl Braun, that "Atlee performed the operation two hundred and forty-six times from 1843 to 1871, and by this has contributed the most to its enfranchisement," is simply a begging of the question. To "enfranchise" anything is, according to Webster, to liberate it from slavery. When Wells began to operate in 1858, ovariotomy was most emphatically under the yoke. That he profited by the publication of Atlee's cases in 1855 is doubtless true. By 1872 he had completed his first five hundred cases, or more than twice as many as Atlee, in three years' less time. If figures are to be the criterion, the case needs no further argument. The tone of medical literature in 1858 was decidedly against the operation, but Wells by his splendid and increasing successes speedily brought the cause to a triumphant issue.

THE ACTUAL DEATH-RATE OF WAR.

Some tables have recently been published, based upon a report of the Adjutant-General of the United States Army, showing the actual per cent. of deaths from sickness and by battle during the War of the Rebellion. It is a truism that in war disease kills more than the bullet. The detailed facts showing this, however, in the case of our own war, are of special interest.

The States and Territories contributed to the army of the Union 3,500,000 men. Of these, during the four years of war, there were killed in action 67,030, or 2.88 per cent.; there died of wounds 43,000, or 1.85 per cent., making a total of deaths from violence 110,030, or 4.73 per cent. On the other hand there died from disease 224,586, or 9.68 per cent., disease being thus twice as fatal as the bullet.

The total mortality among Union soldiers during the war would be 334,616, or 14.41 per hundred of those engaged. Thus over fourteen out of every hundred soldiers died in the four years' war.

This is an enormous death-rate, but the figures are often wrongly used, and they do not accurately indicate the mortality rightly attributable to the war. The ordinary death-rate among male adults is about nine per thousand annually in this country. During the four years of the war there would have occurred under any circumstances among the three and a half million of soldiers about 126,000 deaths, leaving, therefore, only somewhat over two hundred thousand deaths attributable to the war. To put it in a general way, instead of four men who would have died in the natural course of events, fifteen men out of every hundred died in the course of the war.

The death-rate from bullets is only a little greater than the death-rate in civil life, but the soldier has added the enormous risks from disease.

A CONTRIBUTION TO PULMONARY SURGERY.

It is not so very long ago that diseases of the internal organs, both abdominal and thoracic, were looked upon as exclusively within the domain of the physician. They were to be relieved, if possible, by medical means, but if these failed, as they often did, there was no recourse left to the patient but to settle up his earthly affairs as best he could and resign himself to the inevitable. But the present generation has seen great changes in this respect. We are no longer content to stand by with folded arms and watch the gradual destruction of any organ by disease, but the surgeon steps in, and with his knife cuts out the offending part, with as little hesitancy as he formerly amputated a diseased limb. Having conquered the field of abdominal surgery, we now turn to the thoracic organs. The distended pericardium is tapped, and even pulmonary cavities are entered with the needle, and their fetid contents removed. Experiments have also been made on animals to determine how much of the lung itself could be cut away without destroying life.

A further contribution to pulmonary surgery was made at a recent meeting of the London Clinical Society, an account of which we have received from our London correspondent. At this meeting, Dr. Cayley, who has already done much to advance surgery of the lungs, related a case of hæmoptysis, in which he had artificially induced pneumothorax, so as to collapse the lung, and thus arrest the hemorrhage. The patient was a porter, twenty-one years of age, who was admitted into the Middlesex Hospital, on February 9th, for hæmoptysis. During the next four or five weeks he had repeated attacks of severe hemorrhage, despite active treatment. There were no well-marked physical signs of pulmonary disease, and Dr. Cayley thought the hemorrhage was due to a pulmonary aneurism, or to the ulceration of a large vessel. He determined to induce pneumothorax, with the expectation that the great diminution of the circulation through the collapsed lung, together with the pressure exercised by the air, would arrest the hemorrhage. And if it should be subsequently found that there was active development of tubercle in progress in the lung, no harm would have been done, and it might even be checked for a time. The pleural cavity was accordingly opened on March 10th, by Mr. Hulke, and a double drainage-tube introduced. Carbolic gauze was placed over the opening, and air passed in and out freely. The breathing was greatly accelerated, and the apex of the heart was moved over to the right. The patient coughed up blood twice during the night following the operation, but there was no more hemorrhage after this. He died suddenly on the fifth day after the operation. At the autopsy both lungs were found studded with recent gray miliary tubercles. The right lung was free from any old tubercular disease. In the apex of the left lung there was a very small old vomica. The lower lobe, and part of the upper lobe, were collapsed, and the pleural surfaces smeared with recent lymph. In the lower part of the upper lobe was a cavity as large as a walnut, nearly filled by a light-colored laminated clot. There was a small cavity in the centre of the clot which communicated with a good-sized branch of the pulmonary artery.

The wisdom of this procedure might be questioned by many, yet it would seem in this instance, on the whole, not to have been unjustifiable. For there were no signs of old pulmonary disease during life, and the operation arrested, at least temporarily, the hemorrhage, which was sapping the patient's strength, and threatened to cause his death. Possibly, as was suggested during the discussion of this report, the same result as regards arrest of the hemorrhage might have been obtained by the injection of carbolized air into the thoracic cavity, through the needle of an aspirator, or even of a hypodermic syringe. This experiment will doubtless be repeated, and it may prove, in the end, a valuable means of arresting hæmoptysis, uncontrollable by ordinary medical measures.

News of the Week.

NAVY NEWS.—Official List of Changes in the Medical Corps of the U. S. Navy during the Week ending July 4, 1885: Assistant Surgeon Joseph Shofer, assigned for duty on board U. S. Receiving Ship St. Louis, League Island, Pa., July 10, 1885.

COLLEGE OF PHYSICIANS AND SURGEONS OF CHICAGO.—Dr. N. Senn, of Milwaukee, Wis., has accepted the Chair of Principles and Practice of Surgery, and Professor Christian Fenger that of Clinical Surgery in the College of Physicians and Surgeons of Chicago.

NEW YORK POST-GRADUATE SCHOOL.—Dr. Horace T. Hanks has been elected Professor of Diseases of Women, in the New York Post-Graduate Medical School and Hospital. Dr. Lewis S. Pilcher has been elected Professor of Clinical Surgery in the same school.

THE MEDICAL REGISTER FOR 1885-86.—The twenty-third volume of the "Medical Register" of New York, New Jersey, and Connecticut comes to us promptly in its usual style. It contains the names of 6,545 physicians, as follows: New York State list, 2,775; New Jersey State list, 756; Connecticut State list, 514, an increase of 89, 18, and 18 respectively, or a total of 125. The New York City list comprises 1,902 names, an increase of 113. The Brooklyn list contains 598 names, 87 more than last year. Total increase in the three States, 325. Of those registered in the New York City list last year 316 have changed their residences in the city, and 26 have died. There are now 142 serving in the different hospitals and asylums.

GRAVES' DISEASE IN BLONDES.—Dr. George C. Mosher, of Kansas City, writes: "Dr. Neal's query in No. 25, vol. xxvii., of THE MEDICAL RECORD, calls to mind five cases of Graves' disease which I have seen, two in Ohio and three here, all occurring in female subjects. Each of these persons had blond hair. The coincidence, if nothing more, is striking."

THE DUBLIN MEDICAL SCHOOL.—A sum of from $50,000 to $60,000 is about to be expended in adding to the buildings of the Dublin University Medical School, which, owing to the steady increase of the school in recent years, are no longer adequate for its accommodation.

A Novel Review and Criticism.—For a picturesque evacuation of rubbish commend us to an editorial review of "An Ethical Symposium" in a recent issue of the *New England Medical Monthly*. Our usually amiable and progressive contemporary is not only two years behind time in its wholesale denunciations of some very honorable and clear-sighted gentlemen, for "appealing to the public," but it quite forgets that a similar work to the "Ethical Symposium," appealing to just as wide a circle, was first issued by one of its own *dei majores*. In the name of the Prophet, dear contemporary, let us have peace.

The *New Orleans Medical and Surgical Journal* comes to us in a new dress and improved make-up, highly creditable to its present energetic editors.

Collective Investigation in Russia.—A meeting of delegates from the different medical societies has been held in the Red Cross Hall, in St. Petersburg, for the purpose of organizing collective investigation in Russia. The question arose as to whether it would be better to establish an independent central committee in Russia, or to send the individual reports direct to the International Committee in London. The meeting unanimously decided in favor of the former alternative, on account of the difficulty of entering into an extensive correspondence in a foreign language. The meeting consequently resolved itself into the Collective Investigation Committee for Russia, and arranged to keep up communication with the English Committee.

Further Withdrawals from the Organization of the Congress.—We learn that at a meeting of the Boston officers of the International Medical Congress, resolutions to withdraw from the organization of the said Congress were adopted. Drs. R. Amory, C. J. Blake, H. I. Bowditch, James R. Chadwick, Derby, Wadsworth, and, in fact, all the officers, are included in this movement. It is also stated that Drs. S. C. Busey, Swan, Burnett, and other Washington physicians; Dr. J. N. Mackenzie, of Baltimore, and Dr. George J. Engelmann, of St. Louis, have withdrawn.

A Practical Attempt at Reform in Medical Charity.—The Northeastern Dispensary, of this city, which is earning an excellent reputation for liberality in management, has undertaken to carry out a practical measure of reform with regard to the dispensing its charity. The following circular has been drawn up, signed by every member of the medical staff, and forwarded to the managers, who, we understand, have heartily approved of it: "We, the undersigned, Attending Physicians to the Northeastern Dispensary, feeling the great evil resulting to medical charity throughout our city from neglect of the use of proper means to rid our institutions of charity from those able to pay, and other unworthy applicants for gratuitous service, and feeling that we, as a class, have placed at our disposal means intended only to relieve the *worthy poor*, feel called upon to request, that on and after September 1, 1885, the Northeastern Dispensary co-operate with the Charity Organization Society in the work of compelling this nuisance to cease, assisting in avoiding the abuse of medical charity throughout our city."

Vacancies Left in the Organization of the International Medical Congress by the Withdrawal of the Philadelphia Members.—The withdrawal of the Philadelphia physicians from any connection with the International Congress, leaves some important official vacancies in the revised preliminary organization. The office of Secretary-General has been made vacant by the withdrawal of Dr. John H. Packard; the Presidency of the Sections on Therapeutics, Medicine, and Anatomy, are made vacant by the withdrawal of Drs. H. C. Wood, J. M. Da Costa, and J. Leidy; Vice-Presidents of the Sections on Pathology, Medicine, Surgery, Obstetrics, Ophthalmology, Dermatology, and one Vice-President of the Congress, Dr. Alfred Stillé, have withdrawn. The Secretary of the Section on Therapeutics, and three members of the Committee of Arrangements have withdrawn. Philadelphia is left practically unrepresented in the organization of the Congress. Out of forty-eight officers twenty-eight have withdrawn, and these include nearly all who held prominent positions. The resignation of Dr. David W. Yandell leaves vacant the Presidency of the Section on Surgery. Thus, four of the most important sections are left headless.

The Representation of New York City in the International Congress.—Only twenty-nine physicians of this city, nearly half of whom are connected with the same medical college, occupy official positions in the preliminary organization of the proposed Congress. Philadelphia, with fewer physicians, was given forty-eight positions, and Boston, with one-fourth the number of doctors, was given twenty positions.

One was Taken and the Other Left.—

Taken.	*Left.*
A. L. Loomis.	J. G. Curtis, E. G. Janeway.
E. Curtis, R. F. Weir.	J. C. Dalton, F. Delafield.
S. O. Vander Poel, A. Jacobi.	E. G. Griswold, E. T. Sabine.
F. H. Bosworth, T. Addis Emmet.	H. Goldthwait.
G. M. Lefferts, D. B. St. J. Roosa.	H. M. Biggs, T. G. Thomas.
L. D. Bulkeley, C. R. Agnew.	A. Clarke, A. R. Robinson.
E. L. Keyes, A. McL. Hamilton.	E. Elliot, D. B. Delavan.
F. N. Otis, S. Sexton.	J. W. S. Gouley, R. P. Lincoln.
R. W. Taylor, L. Johnson.	A. Flint, F. H. Hamilton.
A. H. Buck, J. H. Ripley.	A. Flint, Jr.
Wm. H. Draper.	L. A. Sayre, J. L. Smith.
E. Noeggerath, P. F. Mundé.	B. Robinson, S. Smith.
T. M. Prudden.	W. T. Lusk, C. A. Leal.
H. Knapp.	H. D. Noyes.
A. H. Smith.	T. M. Markoe.
W. H. Dwinelle.	F. S. Dennis.
E. A. Bogue.	E. G. Loring.

The Canada Medical Association holds its annual meeting at Chatham, Ont., September 2d and 3d, under the presidency of Dr. Osler.

A New Cancer Cure.—Dr. Pampilo, surgeon of St. Peter's Hospital, Pernambuco, cites many cases in which he has cured cancers, chancroids, epitheliomas, and malignant erectile tumors by the use of the Piscidea erithrina juice, etc.—*Progr. Med., Cincinnati Lancet and Clinic.*

The Deterioration of Chrysophanic Acid.—The editor of the *Journal of Cutaneous and Venereal Diseases* calls attention to the fact that chrysarobin (chrysophanic acid) has much deteriorated in quality in the past few years, so that ten per cent. solutions do not accomplish now what five per cent. solutions used to do.

THE NEW ARMY MEDICAL MUSEUM.—The plans for the new National Medical Museum building will soon be completed by the architects and submitted to the Board of Commissioners for Approval. The Board consists of the Secretary of War, the Secretary of the Smithsonian Institution, and the Architect of the Capitol. The site selected for the structure is the Smithsonian grounds, just east of the National Museum. The original estimate of its cost was $250,000, but Congress appropriated only $200,000, and provided that the completed structure shall not exceed that sum. It will extend three sides of a parallelogram, with a plaza front to the south, and will have between fifteen and eighteen thousand square feet of space upon a single level. The ground floor is to be used for the pension records of the War Department.

A NEW BRAZILIAN JOURNAL.—We have received the first number of a new Brazilian Medical Journal, entitled *Revista dos Cursos Praticos e Theoricos*. It is the official organ of the Faculty of Medicine of Rio Janeiro, and is edited by five professors of that Faculty. The present issue contains a number of carefully prepared articles.

THE LATE DR. JOHN F. GRAY, of this city, a well-known homœopathist, used to prescribe stibium so often that he once said he expected to have inscribed on his tombstone, "John F. Gray, Stibium." Stibium is a good old remedy, much used in the days of Paracelsus and the chemical school. Dr. G. used it in physiological doses.

PROPOSED MEDICAL LEGISLATION IN GEORGIA.—The Medical Association of the State of Georgia, says the *Atlanta Medical and Surgical Journal*, has raised a committee to call the attention of the General Assembly to, and invoke its action on, two subjects of interest to the medical profession. Bills in relation to them have been introduced, referred to appropriate committees, favorably reported on, and are now pending before that body. The object of one of them is to provide for the payment of reasonable compensation to witnesses sworn as experts in judicial trials; the other, to facilitate the study of anatomy, by permitting, under proper instructions, the procurement of the necessary material for that purpose.

CONSULTATIONS WITH HOMŒOPATHS IN CANADA.—The *Canadian Practitioner* complains that several prominent physicians in the Province consult habitually with homœopaths. It very correctly deplores this practice, but incorrectly urges the Dominion Association to take action in the matter. Any attempt on the part of a body of physicians to combine and try to take away the right of the individual to consult with whom he pleases will fail in the future, as it has done in the past. The best way to get rid of homœopaths is to show the people that rational medicine is the best, and includes all the good in homœopathy or any other "pathy."

THE CHOLERA IN SPAIN.—In the past fortnight the spread of cholera in Spain has been extraordinarily rapid. Up to the last week in June about 4,000 cases had been reported. Since then the total number of cases has reached the neighborhood of 15,000. Every day the papers report a total number of new cases ranging between one and two thousand. The mortality, if correctly given, is somewhat less than one-half, and does not differ greatly from that of last year's epidemics. But it will be seen that already the epidemic in Spain has had more victims than that of last year in France. As this result has been reached so early in the summer the outlook is a bad one.

A NEW CITY HOSPITAL FOR CONTAGIOUS DISEASES will shortly be opened, under the direction of the Health Department, on North Brothers Island. It is intended to take the place of the Riverside Hospital. The hospital building is of brick, two stories high, heated and ventilated with the most improved appliances. There is a large ward on each floor, lighted on three sides, and overlooking each ward is a small glass-incased room to be occupied by nurses when their actual attendance in the sick-room is not required. The hospital is designed to hold seventy-five patients. The plans call for ten additional frame buildings, capable of holding forty people each, to be used in case of an epidemic, but only three of these will be built at present.

Reviews and Notices.

INTESTINAL OBSTRUCTION: ITS VARIETIES, WITH THEIR PATHOLOGY, DIAGNOSIS, AND TREATMENT. By FRED. TREVES, F.R.C.S., Surgeon to, and Lecturer on Anatomy at, the London Hospital, Hunterian Professor of Anatomy at the Royal College of Surgeons of England. With Sixty Illustrations. Philadelphia: Henry C. Lea's Son & Co.

THIS work is in substance the essay to which the Jacksonian Prize for 1883 was awarded by the Royal College of Surgeons of England. It is a thoughtful and well-written monograph on a subject that interests both the physician and surgeon. Dr. Treves has classified the various forms of intestinal obstruction according to pathological data, because, as he truthfully remarks, our clinical knowledge of the subject is less precise than our knowledge of the morbid anatomy of intestinal obstruction. The work is illustrated by some well-executed original drawings, and is altogether worthy of being read and studied.

A MANUAL OF THE PRACTICE OF SURGERY. By THOMAS BRYANT, F.R.C.S. With Seven Hundred and Twenty-seven Illustrations. Fourth Edition, thoroughly Revised. Pp. 1039. Philadelphia: Henry C. Lea's Son & Co. 1885.

THE present edition of Bryant's "Surgery" has been very thoroughly revised by so competent a surgeon and literary critic as Dr. John B. Roberts. It shows many marks of improvement over earlier editions, and in size and typography it is quite the model for a student's and practitioner's manual. Mr. Bryant's work has gone through three American editions, and it is familiar to American readers. The author is a skilful surgeon of long experience, and his work is clear and practical in its character. Mr. Bryant is anti-Listerian in his views, and the fact that there is now a fashion for antiseptics has, perhaps, lessened the prestige of his work. We believe that Mr. Bryant is probably as successful a surgeon as any of the ultra-Listerians, yet he has unquestionably erred in exhibiting a certain amount of prejudice against the antiseptic methods; for, whatever may be the theory, nothing is more certain than that the young surgeon should be emphatically taught the value of antiseptic cleanliness in its most minute details. This Mr. Bryant does not do.

We do not propose to go into any analysis of the work before us. Bearing in mind the criticism that has been made, the book can be safely trusted to guide the student and practitioner.

A Treatise on the Science and Practice of Midwifery. By W. S. Playfair, M.D. Fourth American Edition, from the Fifth English Edition, with Notes and Additions, by Robert P. Harris, M.D. Philadelphia: Lea Brothers & Co. 1885.

In the preface to the first edition of this work, in 1876, the author states "that there is no department of medicine in which more has been done of late years, and none in which modern views of practice differ more widely from those prevalent only a short time ago." In the last decade this cannot be said with as much truth. Consequently this edition contains few striking changes, and these naturally occur in that department in which at present investigation is most rife, namely, embryology.

The work is regarded by teachers in obstetrics, from the conciseness of its statements of theories, and its clearness, as one of the best for students, and it will probably maintain its position for some time to come among the standard works on the subject of which it treats.

A Treatise on Asiatic Cholera. Edited and prepared by Edward Charles Wendt, M.D., Curator and Pathologist of St. Francis' Hospital, New York Infant Asylum, etc. 8vo, pp. 403. New York: William Wood & Co. 1885.

We have nothing but praise for the careful and painstaking work of Dr. Wendt, in this the most complete volume on the subject of cholera that has appeared on this side of the water. His associates are those best qualified to write on their respective topics. The work is divided into seven parts. Part I. treats of the "History of Asiatic Cholera." Section I. is by Dr. John C. Peters, of New York, on the "General History of the Disease, and the Principal Epidemics up to 1885." Dr. Ely McClellan writes Section II., giving a "History of Epidemic Cholera as it affected the Army of the United States."

Dr. Wendt's work, proper, begins with Part II., concerning etiology. Successive parts treat in turn of symptomatology, course, duration, mortality, complications, and sequelæ. The chapters on morbid anatomy and pathological histology are full and complete. Part V. gives a full account of the methods of bacterioscopy and the preparation of pure cultures. Treatment is discussed in Part VII.

Part VI. is divided into three sections. The first, by Dr. George M. Sternberg, U.S.A., is on the "Destruction of the Cholera Germs." The second, by Dr. John B. Hamilton, Surgeon-General United States Marine Hospital Service, concerns the "Prevention of the Spread of Cholera." The third, by Dr. McClellan, is on "Cholera Hygiene as Applied to Military Life."

It will be seen that while the scope of the work is a wide one, no more able corps of *collaborateurs* could have been associated in its preparation. The early history of cholera in New York is treated of in full by Dr. Peters, and is the most complete *résumé* of the subject yet published. A wide range of discussion is taken by the other associate editors concerning international and municipal sanitation. It is about Dr. Wendt's part of the work, however, that public interest will most centre. He discusses the various etiological theories of the last half century, dwelling particularly on that of Koch. A translation is given in full of the latter's memorable address before the Berlin Conference last summer. In regard to Koch's doctrine, Dr. Wendt takes the middle ground, that "while it has not been finally established as a scientific truth, it has much in its favor." He truly says that "the extremely divergent opinions regarding cholera, entertained even at the present day, would scarcely justify an attempt to present a completely harmonious picture of the disease." His conclusions are as follows: Cholera originates in India, where it is now endemic. Its specific cause is an organized body capable of rapid multiplication both within and without the human organism. Any extension of the disease is caused solely by human intercourse. It never originates *de novo* in a given locality. Its outbreak and dissemination may be favored by local conditions. Such dissemination may occur from direct personal contagion, but far more frequently by fomites and water-channels (rivers, pipes, sewers); exceptionally by air, but only at very short distances. The virus acts first and with greatest intensity upon the intestinal tract.

Dr. Wendt does not think we possess any specific cure for the disease, yet he earnestly deprecates any resignation to the idea that we cannot control the disease by treatment. We should promptly control every premonitory diarrhœa with the opium tinctures and mineral acids (preferably sulphuric). Complete rest and abstinence from food should be enjoined. If the disease develops into well-marked cholera, he recommends before collapse morphine hypodermatically, with iced fluids, weakly acidulated, for thirst. In incipient collapse a warm bath by means of slaked lime is deemed of service. In well-marked collapse all medication should be stopped. During reaction careful nursing and strict diet are all important. Solid food is dangerous. Opium should be avoided, as a rule, in this stage. Then gradually build up the system. Ferrán's inoculation experiments Dr. Wendt does not regard, as yet, as by any means decisive.

Robert Boyle: A Biographical Sketch. By Laurence Saunders. Pp. 104. London: Gilbert Wood & Co. 1885.

The name of Boyle was borne by two Englishmen, father and son, whose chief aim was to establish a scientific system of ventilation for large buildings and for vessels. In the literature of sanitation their work has been fully recognized. This biographical sketch is well written, and highly extols Boyle as an inventor and philanthropist.

The Regimen in Gout. By William Ebstein, Professor of Clinical Medicine in Göttingen. Translated by John Scott, M.A., M.B., Honorary Physician, Manchester Hospital, etc. 8mo, pp. 64. London: J. & A. Churchill. 1885.

Many practical suggestions are contained in this small volume. The author has no particular hobby, and advises moderation in all things, without inclining at all to the starvation plan. All gouty manifestations he regards as due to uric acid, which is a "chemical poison which can cause not merely inflammatory but also necrotizing and necrotic processes in animal tissues." Animal and vegetable diet are permissible. Fat is regarded by Ebstein as a valuable food in gout, within necessary bounds. Alcoholic drinks may be used in moderation. The intestines should be irritated as little as possible. Baths are valuable, the warm bath being generally preferable in cases with renal complications.

The Diaphragm and its Functions: Considered Specially in its Relations to Respiration and the Production of Voice. By J. M. W. Kitchen, M.D. "The Voice" First Prize Essay. Albany: Edgar S. Werner. 1885.

This little treatise calls attention in a forcible way to the often overlooked importance of the diaphragm in the human economy. It is, however, of greater value to professional singers than to the practitioner, who is supposed to be familiar with the evils of tight-lacing and similar offences against the chief respiratory muscle of the body.

Reports of Societies.

KENTUCKY STATE MEDICAL SOCIETY.

Thirtieth Annual Session, held at Crab Orchard Springs, Ky., June 4, 5, and 6, 1885.

(Special Report for THE MEDICAL RECORD.)

FIRST DAY—WEDNESDAY, JUNE 4TH—AFTERNOON SESSION.

THE thirtieth annual session of the Kentucky State Medical Society was called to order at Crab Orchard Springs on Wednesday afternoon, June 24th, by the President, Dr. Pinckney Thompson, of Henderson.

Prayer was offered by the REV. J. BOGLER, of the Presbyterian Church of Hustonville.

COLONEL W. S. HAYES, of the *Louisville Courier-Journal*, President of the Crab Orchard Springs Co., delivered the address of welcome, which was supplemented by one from Dr. EDWARD ALCORN, of Hustonville, Chairman of the Committee of Arrangements.

DR. WM. BAILEY, of Louisville, delivered the report on the

PRACTICE OF MEDICINE.

He thought the common practice of encumbering the office table of the practitioner with new preparations in pharmacy had grown to be a great nuisance. He had not the courage to undertake to uncork the one tithe. He thought the physician should go before and ask the pharmacist to prepare such a medicine, not the pharmacist urge the physician to use his preparations. He believed that it called forth too much free medicine taking. He recommended that new remedies be first thoroughly tried by competent hands in public institutions, then given to the profession if found worthy. He discussed cholera and ascribed all honor to the brave men who were investigating it so diligently. The germ-theory of disease is the great question of the age, whether it stands or falls. All conditions in regard to this disease have not been maintained in most cases, and we are compelled to argue solely upon analogy or inference. To prove that the comma bacillus is the cause of cholera it is necessary to find the bacilli in the blood of the patients sick with cholera; that they shall be found in every case; that they shall never be found where the disease does not exist, and that inoculation with them shall produce the disease. Dr. Strauss claims that the shorter and more violent the attack of cholera the fewer were the bacteria found in the intestines. This is an important consideration in determining the causative relation between cholera and "commas." To my mind they should yet be held *sub judice*. I feel like asking you on this account to further make use of your knowledge of punctuation, and after every "comma" (,) to place an interrogation (?), as denoting that further inquiry or investigation is to be made before the period (.) can be reached, and then Eureka (!!!). These investigations can be carried on but by the few favorably situated for study. Therefore we must possess our souls in patience and wait till the conclusion is formed. He thought from the history of cholera that it is due to climatic influences, as malaria, for instance, or epidemic dysentery and yellow fever. Improved sanitation should be the watchword. He inclined to the plausible germ-theory, and stood ready to bow to the inexorable power of logical demonstration.

The report was discussed by Drs. Dudley S. Reynolds, Louisville; J. M. McCormic, Bowling Green; J. B. Marvin, Louisville; and John Jaeger, Campbellsburg.

FIRST DAY—WEDNESDAY, JUNE 4TH—EVENING SESSION.

DR. PINCKNEY THOMPSON, of Henderson, by virtue of his office, delivered the

PRESIDENT'S ADDRESS.

He congratulated the Society on its ability to meet together at such a pleasant place. He paid a beautiful tribute to the dead members. In viewing this gathered assembly he proudly thought, "I, too, am a physician." He spoke of the profit to be gained from such gatherings, all sharing each other's labors and experiences—in fact, a sort of universal clinic. The wealth of wisdom of the wise and the great becomes more or less the actual possession of the humblest member of our profession. We are second to no other class of men in the world. A wise old Roman long since said: "Men are at no time so like the gods as when they try to give health to other men."

He spoke of him who lifted the practice of medicine from a tyrant priesthood and a mercenary craft to an unselfish profession. He who takes upon himself the office of a physician takes upon himself a very grave responsibility. Neglect or abuse must be most culpable. At the door of the physician he laid the responsibility of many of the crimes of the world. For to whom are the feeble constitutions and the defective intellects more chargeable? To have a good brain we must have good blood. "Blood will tell." Whence can blood, physiologically speaking, come to him who has been born and bred in disregard of the laws of health; wanting good blood the brain-power fails. Then the whole life, mental, moral, and physical, fails and falls; degeneration results. He referred to the physical, mental, and intellectual degeneration of American women. "Then like brings forth like: this so-called course of life is a course of death. Who, if not the doctor, can stem this fatal tide." Overpressure at school was considered. He compared the school-children of the city with those of the country. Who of us have not seen again and again the country boy go to the town or city, and with his robust constitution and cranium full of brain-power, ride over his city or town competitors. The women of this have not improved over the former generation. He would like to think each girl an angel, and every woman a goddess. But they would be very sick angels and very feeble goddesses. The city school-houses, which he termed elevated slaughter-houses, came in for their share of condemnation. He referred to the increase of gynecological sanitariums, and said that when a man marries himself to one of these latter-day girls, brought up in a five-story school-house, he mortgages himself to some doctor for the whole time his wife shall live. He lauded the prevention over the cure of disease, and appealed to the profession to do all in its power to mitigate this evil. He thoroughly believed in educating the people, especially the mothers, in the proper care of their daughters.

DR. E. WILLIAMS, of Cincinnati, next read a paper on

THE PHYSICIAN'S OPPORTUNITY FOR BEING AND DOING GOOD.

By physician he did not mean the patent-medicine man or advertising quack. All proprietors or dealers in and advertisers of such so-called medicines will have to face an account at the last day that no physician would be willing to meet. The toot-horn quack has too much brass and cheek for an honest doctor. His brazen pretentions can pass current only with ignorant people. He may make money, but money cannot save him from the bottomless pit, where he will seethe forever in the all-healing vapors of his infallible nostrum. He then defined a good physician. It was not, he said, goody-goodness, which is pious taffy, neither nasal twang righteousness. Modest modesty never whines. He next considered the relations of the minister and physician, saying that they should be co-workers, not antagonists. The following is the prayer of the doubting physician at the death-bed: "O God, if there be a God, have mercy on this man's soul, if he have a soul." No half-way shanty, shaky as this prayer, will answer there. He believed in the need of a sound divinity in the medical profession, and a healthy hygiene in the Church. He denounced the practice of religious periodicals advertising quackery as an outrage on God and man. But what use to denounce when "there's millions in it." Theologically he believed in the germ-theory.

SECOND DAY—THURSDAY, JUNE 5TH—MORNING SESSION.

The Secretary reported $100 contributed to the Sims Memorial Fund. He had received $200 dues; leaving $75.05 in the treasury.

A number of new members were received, among them

TWO LADY PHYSICIANS,

the first of their sex to become members of this Society.

DR. J. M. MATTHEWS, of Louisville, made the report on

GENERAL SURGERY.

He commenced with a tribute to the memory of Samuel D. Gross, who had been at one time president of the Society. He touched mostly on results of new methods in surgery. The scope of the subject being so great, he confined his remarks to those operations of recent attempt. Listerism, if it had but caused greater attention to cleanliness, has done well. Attention to minor details was urged, also climate, sanitation, hygiene, and general surroundings of the patient. Since our last meeting there has been given us a surgical boon second only to ether and chloroform, viz., the hydrochlorate of cocaine. It has a wide range of surgical practice in the eye, ear, nose, mouth, throat, etc. The physiological action seems to be the paralyzation of the sensory nerves, and it may be the posterior columns of the spinal cord. Knapp says that it abolishes reflex irritation, and that it has no cumulative effect and exerts no bad effect on the nutrition of the parts subjected to its action. A question of moment is, Does the application prevent or lessen repair? In some operations done by myself I have imagined that it did. When large amounts of skin are to be cut through I have found that rhigolene applied locally by spray is equal, if not superior, to cocaine. In rectal diseases cocaine is not a success. He then considered general etherization and spoke of the comparative value of different anæsthetics. Rectal etherization has not met with the success that was once hoped for. It now has but few advocates, who can say but little in its favor. He considered antiseptic surgery, speaking of bichloride of mercury, iodoform, hydrate of chloral, bismuth, turf-dressing, boracic acid, eucalyptus oil, aseptol, naphthaline, Listerine, etc.

A question, to the surgeon one of great moment, is, Can he while attending operations of pyæmia, erysipelas, etc., prevent the contagion that is said to be communicable? Here he quoted the views of Professor Volkmann, as written to Dr. George F. French, of Minneapolis, and quoted in a paper by the latter read before the Obstetric Section of the American Medical Association at New Orleans. Volkmann says: "A surgeon who disinfects himself well can, immediately after making a *post-mortem*, undertake any operation known to surgery." This is a strong saying of an eminent man, very hard to believe. He considered abdominal surgery, and deplored the fact that it was not followed with more success under American hands. Lawson Tait says this is due to the fact that too many men are engaged in the work. He queried, Is it not justifiable to make abdominal section for gunshot injury? He considered surgery of the kidneys, nephrotomy, nephro-lithotomy, and nephrectomy; then the surgery with relation to empyema, the thoracoplastic operation of Estlander.

DR. T. A. REAMY, of Cincinnati, in discussing the paper, said: I can conceive that it is perfectly safe to pass from the dead-house to the operating-table. The germs of the dead-house are not those of disease. It is a question of greater importance to determine can one pass from the house of the living to the lying-in chamber? He believed it could be done, and gave minutely his formula for a disinfecting bath.

The paper was further discussed by Drs. E. Williams, of Cincinnati; A. M. Vance, W. O. Roberts, T. B. Scott, and William Cheatham, of Louisville.

DR. ARCHIBALD DIXON, of Henderson, reported on

LAPAROTOMY.

He reported a case of abdominal tumor, believed to be uterine fibroid, and producing ascites.

OFFICERS ELECT.

The Committee on Nominations made the following report, which was adopted, and the gentlemen elected:

President—Dr. J. P. Thomas, Pembroke.

Second Vice-President—Dr. O. D. Sharley, Winchester.

Junior Vice-President—Dr. R. C. McChurn, Lebanon.

Permanent Secretary—Dr. J. Steel Bailey, Stamford.

Assistant Secretary—Dr. F. Dunlap, Danville.

Treasurer—Dr. Edward Alcorn, Stamford.

Librarian—Dr. J. L. Taylor, Warren County.

Chairman of Committee of Arrangements—Dr. S. W. Willis, Winchester.

Winchester was chosen as the next place of meeting; time, the last Wednesday in June.

SECOND DAY—THURSDAY, JUNE 5TH,—AFTERNOON SESSION.

DR. DUDLEY S. REYNOLDS, of Louisville, made the

REPORT ON OPHTHALMOLOGY.

He considered it of great importance to know well the cause of squint and important to correct it as soon as possible. Errors of refraction should be looked after.

The paper was discussed by Drs. E. Williams, Cincinnati; William Cheatham and J. Morrison Ray, Louisville.

DR. WILLIAM CHEATHAM, of Louisville, made the

REPORT ON OTOLOGY.

His paper dealt mostly of earache, its importance and manner of treatment; he warned every one against the use of poultices; and advocated early treatment in all cases.

Discussed by Drs. Webb and Howard, of Shelbyville; Preston B. Scott and William Bailey, of Louisville; E. Williams, of Cincinnati; Pinckney Thompson, of Henderson; J. Jaeger, of Shelbyville; and H. W. Alexander, of Clintonville.

DR. W. O. ROBERTS, of Louisville, read a paper on "Herniotomy," reporting a number of cases.

DR. J. MORRISON RAY, of Louisville, read a paper on "Wounds of the Anterior Segment of the Eyeball."

DR. WILLIAM CHEATHAM, of Louisville, treated of "Neuro-Retinitis Albuminurica," and reported a number of cases and showed microscopical and photographic specimens with the magic-lantern.

DR. J. B. MARVIN, of Louisville, read on "Primary Lateral Sclerosis of the Spinal Cord." Illustrated by the magic-lantern and microscopic and photographic views.

DR. J. P. THOMAS, of Pembroke, made the report on

PHARMACY.

He considered kairin and other antipyretics, pinus canadensis, and hydrastis. He thought there were too many "ines," "ites," and "phytes" creeping into pharmacy.

DR. J. A. LARRABEE, of Louisville, made the

REPORT ON DISEASES OF CHILDREN.

He referred to the necessity of care for the children for the good of the nation, the harm done in schools, factories, mills, etc. In pædiatrics we must learn the language of disease. This, like other languages, must be learned while young. Other specialties are drifted into,

pædiatrics is not. He considered cholera infantum, syphilis, scrofula, measles, and scarlet fever, whooping-cough, and chicken-pox; advocated hypodermic injection of morphia and atropia in children.

Dr. T. B. Greenberg, of West Point, read a paper on "Cholera; its Etiology and Mode of Propagation."

Dr. L. S. McMurtry, of Danville, made the report on "Gynecology."

Dr. T. D. Finck read a paper on "Strychnine and Mercuric Bichloride in the Treatment of Phthisis."

In the evening an elegant banquet was given by the Crab Orchard Springs Company.

Third Day—Friday, June 6th.

The Committee on a State Board of Examiners reported that the bill prepared by it could not be passed, and recommended one requiring registration of diplomas.

Delegates to American Medical Association were appointed.

Dr. J. B. Harwood, of Shelbyville, reported on "Vital Statistics;" Drs. John G. Cecil, of Louisville, read a paper on "Mastitis;" P. S. Connor, of Cincinnati, on "Fracture of the Neck of the Femur;" F. C. Wilson, Louisville, "Instruments Devised to Facilitate Tracheotomy;" R. M. Ferguson, Louisville, "Treatment of Cross Eyes;" J. G. Carpenter, Stanford, "Exsection of Tibia and Right Fibula;" A. W. Johnson, Danville, "Surgery of the Genito-Urinary Organs."

Adjourned.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, April 22, 1885.

John A. Wyeth, M.D., President, in the Chair.

Report of the Committee on Microscopy.

Dr. L. Waldstein reported that the ulcers of the larynx presented by Dr. Boldt at the last stated meeting were tuberculous in character, and showed the presence of tubercle bacilli. Concerning the clinical question whether or not it was primary tuberculosis, the lungs also being tuberculous, the Committee was unable to answer from the anatomical examination.

Scleroderma.

Dr. H. J. Boldt presented a patient, a girl, twenty-two years of age, who from early childhood noticed a swelling of the left lower extremity, first extending up the thigh, and some years afterward the same kind of swelling appeared in the right lower extremity. At the present time the enlargement of both extremities was permanent, and extended nearly to the body. While walking the limbs increased in size considerably, and gave the patient a good deal of pain, caused great lassitude and general debility, so much so that she was unable to pursue her ordinary occupation, that of a domestic. She had presented herself at a number of clinics in Europe, had been examined by Billroth and others in Vienna, and, as far as he could learn, no positive diagnosis had been made. There was but little pitting on pressure, although there seemed to be an infiltration of the subcellular tissue, and, as Dr. Boldt thought, a probable increase of the fibrous tissue due to recurrences of subacute inflammation. From palpation the diagnosis seemed to be between scleroderma and myxœdema; but, as there was no other sign of myxœdema present, and the feel of the limbs was not well marked according to the descriptions given of that disease, he was inclined to the diagnosis of scleroderma.

Dr. Wesley M. Carpenter thought the case belonged to the class which had already been described under the head of congenital hypertrophy, in which one extremity, either an upper or a lower, first became involved and might remain the only extremity affected, or other extremities were affected and the enlargement became persistent. He referred to a case which came under his own observation in the country; the patient was the daughter of a farmer, and was at the time he saw her about twelve years of age. One of the upper extremities was enlarged, especially the hand and the forearm, and the arm to a less extent. The hand and the forearm were nearly equal in size, and presented the appearance of a limb of an ordinary adult man, rather than the delicate extremity of a girl of that age. As he recollected, the descriptions which had been given of this class of cases, of which he had seen three or four illustrations, the affection had been regarded as a neurosis.

Primary Carcinoma of the Liver.

Dr. L. Waldstein presented two specimens of primary cancer of the liver, with the following histories:

The first case was that of a man, F. K——, fifty-one years of age, who came to the German Hospital on the fourteenth of April last, complaining chiefly of pain in the back, between the shoulders, in the lumbar regions, radiating toward the front. There was jaundice. Physical examination revealed mitral regurgitation with stenosis at the aortic orifice. Besides, there were signs indicating cirrhosis of the liver. The patient gradually grew worse, and died on May 10th.

At the autopsy the liver was found of medium size, appeared granular, and the granulations were very large, but at once it showed differences from the ordinary granular atrophy of the liver in the fact that the granulations were prominent, were arranged in groups, connected by fine bands of the same grayish-white color, and they were encephaloid in consistence. The border of the liver was sharp, and the organ was somewhat enlarged. The hepatic tissue between these granulations was depressed below the level of the section. There was no cancerous primary tumor in any part of the body. The mucous membrane of the stomach was smooth, and was covered with a thick layer of viscid mucus. The kidneys were hyperæmic. The parietal peritoneum contained several small nodules, the largest being about the size of a pea and resembling, on section, the granulations seen on the cut surface of the liver. There was considerable retroperitoneal and bronchial enlargement, and these glands were infiltrated and presented the same general appearance of the granulations mentioned. There was also found a tumor adherent to the posterior surface of the sternum, reaching into the anterior mediastinum.

Microscopical examination of the liver proved the disease to be one of two kinds of primary carcinoma of that organ, the origin of which could be traced distinctly to the small bile-ducts.

Only a month later Dr. Waldstein had an opportunity to make a post-mortem examination in a second case, that of a man, C. J. K——, fifty-three years of age, who was admitted to the German Hospital in a comatose state. No clinical history was obtained. The skin was deeply jaundiced. The man died without a diagnosis. There was œdema of the lungs, ascites, and enlargement of the liver.

At the autopsy the appearance of the blood was tar-like. The liver was very much enlarged, extending below the free border of the ribs 8 ctm. The right lobe was especially increased in size, the omentum was drawn down and attached to the sigmoid flexure. The stomach was dislocated, and lying almost perpendicular, with its fundus pressed against the diaphragm, the pylorus pointing downward and a little to the right. The lungs presented evidence of old catarrhal pneumonia, and there were old pleuritic adhesions. The spleen was enlarged and its capsule shrivelled.

On cutting through the enlarged liver a tumor, double the size of an English walnut, was found situated in the part of the liver tissue directly corresponding to the porta hepatis. The gall-bladder was distended by grayish viscid fluid, without evidence of bile coloring matter. The common bile-duct and the cystic duct were found

patent, and it was demonstrated that the jaundice was caused by pressure of the intrahepatic tumor.

On examining the tumor microscopically it was also found to be primary carcinoma of the liver, but of another form. In the first case, the disease was what is known as diffuse primary carcinoma of the liver, while in the second case the disease was circumscribed primary carcinoma of the liver. But in both instances the cancer originated, not in the liver-cells, not from endothelium, but commenced in the bile-ducts.

DR. CARPENTER remarked that primary carcinoma of the liver was so exceedingly rare that a special interest was attached to Dr. Waldstein's two specimens obtained within such a short period of time.

THE PRESIDENT said that he had seen one specimen of primary carcinoma of the liver.

DR. G. A. DIXON presented a specimen of

ANEURISM OF THE ARCH OF THE AORTA,

with the following history:

C. T——, male, native of Finland, longshoreman, was admitted to Charity Hospital March 2, 1885, and died March 29, 1885. Family history negative. The patient stated that he had always been perfectly well up to the winter of 1884, when while walking in the street he suddenly became unconscious, was taken to Bellevue Hospital, where he very soon regained consciousness and found that his left arm and leg were paralyzed. At the end of five days this paralysis began to diminish, and on the ninth day he was able to walk from the hospital, the paralysis having entirely disappeared. There has never been any return of this trouble.

Present attack.—Patient noticed in July, 1884, that he had a slight dry cough and that he began to lose strength. This continued up to January, 1885, when he suddenly became very hoarse, which has continued to grow worse. Throat never has been and is not sore.

Two weeks before admission he noticed that his sputa was streaked with blood. On the day before admission to hospital patient had a very severe hemorrhage, "filling a large washbasin with bright red blood."

On admission to hospital patient was a stout, well-nourished man. Had slight dyspnœa. Voice was reduced to a whisper. The laryngoscope showed paralysis of the left vocal cord.

Physical examination.—Inspection showed veins over left side of chest very prominent. There was a heaving impulse over quite a large area below the left clavicle. Apex-beat of heart in normal position. On percussion the area of cardiac dulness was slightly increased. On the left side, from the clavicle to upper margin of third intercostal space, there was flatness, and to the right of sternum, from the lower border of the clavicle above to the third intercostal space below, extending an inch and a quarter to the right, there was dulness.

Auscultation.—At the apex there are no murmurs. At the base there was heard a loud double murmur, and to the right of sternum, at about the second costal cartilage, there was heard a very loud double bruit, which was heard with maximum intensity on introducing stethoscope into patient's mouth. Liver and spleen were normal in size. Urine contained a trace of albumen. Patient denied any venereal disease; had never been a drinker; and no history of fall or injury could be obtained. Was ordered iodide of potassium, ten grains, three times a day, to be increased, recumbent posture, and a minimum of fluids. Patient remained in about the same condition. On the morning of March 29th he handed his sputa-cup to an orderly, uttered a groan, and died inside of five minutes.

Autopsy.—Brain could not be examined. Lungs were everywhere closely adherent to pleuræ. They were congested. At the base of the left lung a space of about two inches in circumference was filled with clotted blood, and a very minute opening was found into aorta. Heart was enlarged and hypertrophied. Mitral valves slightly thickened. Aortic valves very much thickened. The entire arch of aorta was enormously increased in size and presented all stages of atheroma. Liver and spleen normal. Kidneys showed slight interstitial nephritis.

THE PRESIDENT said that when he was connected with Bellevue Hospital he made an autopsy on a man who died under circumstances not unlike those related by Dr. Dixon, and there was found an aneurism of the descending aorta into which a small opening had been made by pressure against the vertebral column. The patient died gradually. The left pleural cavity was found filled with blood which had escaped through the small opening.

DR. THAYER referred to a case which occurred in the New York Hospital last summer, which resembled the one reported by Dr. Dixon, first, in the obscurity of the diagnosis. The patient was a painter, who gave a syphilitic history. There was almost no tumor of the chest, but finally a slight bulging of the intercostal spaces developed, which rapidly increased until it made a large tumor, 15 ctm. in diameter, of a general spheroidal shape, over which marked pulsation could be felt, with œdema of the tissues, ecchymotic spots, and double friction-sound. The man died suddenly. At the autopsy there was found a small aneurism of a sinus of Valsalva, and upon this a large aneurismal sac had been formed which had eroded the third, fourth, and fifth ribs with their intercostal cartilages, and would apparently have burst within a few hours, as the sac was exceedingly thin. There had not, however, been any rupture of the aneurism. The original aneurism was intrapericardial; the secondary aneurism was entirely outside of the pericardial sac.

Another point of interest in the case was the result of electrolysis, which was tried two or three times. Around the points where the needles had been inserted there was a distinct increase in the thickness of the clot and an evident decrease in the size of the cavity of the tumor, but there were also marked ulcerations which perhaps would have been fatal had the patient survived a little longer.

PURULENT PERICARDITIS—EMPYEMA.

Dr. Thayer also presented the heart and pericardium of a man about forty years of age, who entered New York Hospital with obscure pulmonary signs early in December last. He was thought to have pneumonia, and many of the symptoms characteristic of pneumonia were present, such as bloody sputa, high temperature, etc., but notwithstanding this the patient appeared to be doing very well. Within a few days, however, the case took an unfavorable turn, the pulse grew weak, emaciation occurred, there was afternoon elevation of the temperature, respirations from twenty-five to thirty in the minute, and the pulse above 100 constantly. The change from bad to worse was rapid, and the patient died without special symptoms. Repeated physical examinations of the chest had been made, and the area of cardiac dulness had been carefully noted many times during the patient's illness up to twelve days before his death. He complained of a feeling of compression of the chest which had led to the suspicion of pericarditis, but nothing, however, was found to indicate its existence.

At the autopsy the right pleural cavity was found half filled with thick creamy pus, and the lung showed evidence of recent pneumonic process which had nearly disappeared. The pericardium was distended, and contained a large quantity of pus. All over the visceral surface of the pericardium was a thick layer of pyogenic membrane, continuous with a similar layer over the parietal pericardium. The chief interest in the case centred in the fact that, although careful examination was repeatedly made, pericarditis was not diagnosticated.

DR. L. EMMET HOLT presented

THE PETROUS PORTION OF A TEMPORAL BONE,

accompanied by the following history:

T. M——, aged five years, was seen Friday, April 17th, at the Northwestern Dispensary. He was carried in the

arms of his grandmother, who gave the following history: He had had a chronic otorrhea of the left side since infancy; measles two years ago, never scarlatina; discharge had been tolerably free until two days ago, when it was reported to have ceased. On Wednesday and Thursday he was able to go down in the yard to play, though complaining of severe pain in his left ear. All day Friday he had been quite drowsy, vomiting frequently, bowels being constipated until an injection was given, then moving freely. His rectal temperature was 101° F., his pulse 120. The head was slightly drawn backward. There was slight swelling below the left ear, no redness, no fluctuation. He was pale and disposed to be quiet, but easily roused; pupils normal, tongue coated. He appeared to be quite sick. About six o'clock he was reported to have had a sort of chill; passed a quiet night, taking his milk, but vomiting it in curds. Early Saturday morning asked to be taken up to pass water; said he felt weak and wanted to be put back to bed; called for water to drink, gasped, and died. No convulsions at any time and no paralysis; no loss of consciousness.

Autopsy.—Fifty hours after death. Head: on removing the skull vessels of pia showed marked engorgement; brain showed punctate congestion, but was othewise normal. No fluid in lateral ventricles, nothing found on careful examination of medulla or fourth ventricle; no evidence of inflammation over pia or inner surface of dura. On opening the petrous portion of the temporal bone the middle ear was found filled with very fetid pus, about a drachm in amount, the bony walls carious and so disintegrated as not to be recognizable. This seemed to communicate with the external swelling, probably following the seventh nerve. There was pachymeningitis externa over an area the size of half a dollar, covering the diseased part of bone, and a small accumulation of pus here. Unfortunately the sinuses were not carefully examined. Chest: lungs were somewhat congested and markedly œdematous, but showed neither abscesses nor tubercle; no pleurisy. Pericardium contained about an ounce of clear serum, no signs of inflammation being present. The heart was relaxed, its tissue a little paler than normal, the right side contained a soft clot; velus, normal. Nothing of pathological interest was found in the *abdominal organs*, except in the spleen, which was very large, measuring about five by three inches. It was firmer than normal, yielded a grumous material on section, was free from abscesses. None were found elsewhere. It was not the spleen of septicæmia.

In reviewing the case, the explanation of the symptoms and the cause of death did not seem altogether clear. While the immediate cause seemed to be, without much doubt, heart-failure and pulmonary œdema, the remote cause was not so evident. Was it septicæmia, or was it simply pachymeningitis? Dr. Holt was inclined to accept the latter hypothesis as the more probable one.

Dr. W. M. Carpenter thought that death in Dr. Holt's case could be satisfactorily explained by the sudden development of pulmonary œdema. While the exact explanation of the sudden development of pulmonary œdema had perhaps not been satisfactorily given, the clinical fact remained that it occurred not infrequently, and especially in that class of cases in which the patient had been brought into a low condition from some preceding disease. Not infrequently, patients who had suffered, for example, from pneumonia, and in whom convalescence seemed to be well established, on rising to empty the bladder, as in Dr. Holt's case, were soon taken with pulmonary œdema and died within a very short time.

Dr. Garrish referred to the fact that death from meningitis, secondary to middle-ear disease, was not infrequent.

Dr. Boldt recalled two cases, one of which Dr. Janeway saw, and in both of which it was impossible to make a diagnosis. In both instances the patients died suddenly, and with pulmonary œdema. The autopsies were made by Dr. Janeway, and pachymeningitis was found only after very diligent search. That pulmonary œdema might develop suddenly with pachymeningitis and kill the patient was not so infrequent as might perhaps be supposed, for here were two cases in which the two conditions existed as verified at autopsy. What the exac connection was between the two it was difficult to say.

The Society then went into executive session.

Correspondence.

DR. FERRÁN'S EXPERIMENTS.

To the Editor of The Medical Record.

Sir: It is but natural that the public should take a deep interest in the result of the experiments of Dr. Ferrán, in vaccinating with attenuated cholera virus. Any prophylactic against a disease so dreaded and feared as cholera will be hailed as a boon to mankind.

The progress of Dr. F.'s experiments is noted most flatteringly by the public press, and even medical journals echo the favorable reports in a half-hopeful manner. I fear, however, that these longing expectations are only born of hope. It is true that we vaccinate as a preventive of variola, but we have this fundamental principle to start with—that one attack of variola gives, as a rule, exemption against any subsequent attack. If one attack of cholera conferred exemption against a subsequent attack, we could look to protective vaccination with much more confidence. From what I have seen of the disease, and from those who have observed all the epidemics of the disease that have occurred in this country, I find no warrant for belief that one attack of cholera may not be followed by another in the same person. Most authors make no reference to this point. Goodeve, in "Reynolds' System of Medicine," vol. i., p. 392, states that there are numerous cases on record of persons who have had cholera more than once.

Roberts, part i., p. 219, says: "One attack does not afford protection against another." So far as I am aware, this is the uniform testimony of all who have expressed their views on this feature of cholera.

Now, if an unmitigated attack of Asiatic cholera in its worst form confers no exemption from a subsequent attack, I see no reason to hope that vaccination with attenuated virus will confer any possible degree of exemption or protection. Benjamin Edson, M.D.

DUODENO-CHOLECYSTOSTOMY.

To the Editor of The Medical Record.

Sir: I have intentionally postponed my reply to your note of February 14th, offering me a hearing on the subject of my operation, until some notice of it might appear from abroad. Now that we have a domestic and foreign estimate of this proposed "abnormal cysto-intestinal communication," claiming that whatever merit attaches to it belongs to the so-styled "originals of this proceeding," and not to my improvement upon the process, it seems proper to define exactly my position. The comments upon my mode of uniting the gall-bladder and the duodenum, for the relief of obstruction in the gall-duct, have manifested a want of due appreciation of the main object, in restoring the bile to the alimentary canal near to its normal entrance. If it be conceded that the bile subserves an important end in chymification, and in the preparation of the chyle for the nutrition of the body, with promotion of the peristaltic intestinal action, and correction of fecal decomposition, there can exist no doubt in regard to the importance of introducing it into the duodenum by a fistulous opening from the gall-bladder. It only remains then to determine upon the practicability of effecting this end with safety, and so as not to incur subsequent trouble in the proceeding. This must rest upon a rational inference from my experiments

on dogs, illustrating the union by adhesive inflammation of the outer surfaces of the intestine and gall-bladder, and the maintenance of an opening between them, by ligation of their walls together. In my last experiment, eight days after the primary operation, for simple ligation of the gall-bladder to the duodenum with a silk thread, "the exploration revealed union of the gall-bladder and duodenum, with adhesions of the latter to the lower surface of the liver, over the line traversed by the *cystic gall-duct*, so that it was not practicable to ligate it, as was intended. Neither could the *ductus choledochus* be reached; and yet no doubt existed of the exit by an opening between the gall-bladder and duodenum, as the small size of the gall-bladder indicates that it is kept drained." The *Birmingham Medical Review* "cannot help wondering," after reading the above passage afresh, on the last page of that "extraordinary little brochure," that I had discovered the difference of the cystic gall-duct and the ductus choledochus at least in the dog.

The animal above referred to continued well and quite sprightly for five months; when, on the eve of another experiment, it succumbed from an excessive inhalation of sulphuric ether. But the examination revealed that the most thorough agglutination of the walls effected a compact septum between the gall-bladder and duodenum; while the orifice formed by the ligature had been obliterated, from the fact, no doubt, that the natural channel of the bile was unembarrassed, as was proven by passing the probe through the ducts.[1]

It is an important feature in the history of this experiment, that no undue inflammatory action was set up in the peritoneal cavity, nor did the bile-ducts become involved in the inflammatory action propagated from the ligature to the neighboring serous investments of the gall-bladder and duodenum. The fatal results in the other experiments were owing to the lack of proper precautions in the subsequent treatment; and due likewise, in some of the animals, to the circular row of stitches around the ligature, which is found to be quite unnecessary as well as injurious.

The idea that there may be regurgitation of the chyme into the gall-bladder through a fistulous opening is set aside by the *vis-a-tergo* urging the bile out into the duodenum.

Very respectfully yours,
I. McF. GASTON, M.D.

"A MEDICAL VIEW OF ARMY MORALS."

TO THE EDITOR OF THE MEDICAL RECORD.

SIR: Under the above caption, THE RECORD of June 13th makes an extract from *Col. Med. Journ.* This article is a gross injustice to the "soldiers of America."

While freely admitting that army life tends to the lowering of the standard of morals, and the removal of many restraining influences, yet the opportunities for the gratification of immoral instincts were less during the war of the rebellion among soldiers in the field than among private citizens either then or now. The above-mentioned extract is pleasant reading for the young medical student "*whose father had been in the army.*" American soldiers, both Blue and Gray, deserved better treatment at the hands of physicians. Aside from that, it is untrue. Lack of proper food and prison life, diarrhœa, scurvy, and other chronic diseases were sufficient causes for scrofulous offspring.

In three hundred and eighty careful and prolonged examinations of soldiers, made during the last year, and which examinations are carefully recorded, in only one was positive evidence of syphilis found, and in five only was there presumptive evidence.

These examinations were many of them made for the very purpose of determining whether or not a "specific" disease existed. Take the young men to-day between twenty and thirty-five years of age, and you will find a much larger proportion with evidences of *acquired* syphilis. Take any calling or profession in America and the proportion will be equal, not excepting the clergy, college professors, and editors.

If the statement is true medical examiners for life insurance have been very neglectful in the past, and should rigidly exclude soldiers from the list in the future.

We think the Editor of the *Col. Med. Journ.* possibly mistaken, and if he is correct, a careful examination of soldiers now living will show that Professor Gross was mistaken.

GEO. T. McCOY, M.D.

COLUMBUS, IND., June 20, 1885.

[1] Further details may be found in the March number of Southern Medical Record.

New Instruments.

THE POCKET POLARISCOPE.

BY C. A. BUCKLIN, M.D.

NEW YORK.

THIS is the first instrument manufactured in America for the purpose of testing pebble lenses, the tourmaline tongs being almost exclusively manufactured in France or England.

It consists of a small nickel cylinder, with a slot at right angles to its axis, into which any lens to be tested is placed. Each end of this cylinder is closed by a perforated head, the opening in each head is closed by a plate of tourmaline, the axes of which are at right angles to each other. Tourmaline having the peculiar optical property of allowing light to pass through it in only one plane, the light which comes through the first plate is entirely absorbed when it falls upon the second piece of tourmaline, consequently, it is impossible to see any light through the opening. When a pebble lens is placed in the slot the light comes through the instrument beautifully; but when a glass lens is placed in the slot it is impossible to see any light. The quartz, of which the pebble lens is made, possesses a circular polarization, thus the light which passes through the first plate is so twisted by the pebble that it falls on the proper axis to pass through the second plate of tourmaline.

The question is frequently asked physicians as well as oculists, "Doctor, do you know whether these glasses are pebble or not?" The moment one of them is placed in the slot of this instrument, and you attempt to look at the light, the question is decided beyond criticism. If they are pebble, you see light; if they are glass, you see nothing.

It is an amusing fact that the simplicity and perfection of this little instrument has caused the further importation of all foreign appliances for similar purposes to be abandoned.

Army News.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from June 28, 1885, to July 3, 1885.

AINSWORTH, F. C., Captain and Assistant Surgeon. Relieved from duty at Headquarters, Department of Missouri. S. O. 93, Department of Missouri, June 26, 1885.

TAYLOR, B. D., Captain and Assistant Surgeon. Assigned to duty at Little Rock Barracks, Ark. S. O. 139, Department of the East, July 1, 1885.

Medical Items.

CONTAGIOUS DISEASES—WEEKLY STATEMENT.—Report of cases and deaths from contagious diseases reported to the Sanitary Bureau, Health Department, for the week ending June 27, 1885:

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-spinal Meningitis.	Measles.	Diphtheria.	Small-pox.	Yellow Fever.
Cases.								
June 27, 1885.....	0	12	46	1	109	70	0	0
July 4, 1885.....	0	11	31	4	69	50	3	0
Deaths.								
June 27, 1885.....	0	3	9	1	21	34	0	0
July 4, 1885.....	0	3	3	4	18	18	0	0

A CASE OF POISONING BY CANNABIS INDICA—RECOVERY.—Dr. Thomas W. Lauterborn, of Newark, N. J., writes: "Hemp of India has been largely employed in my practice for cephalalgia at the menopause, and with very uniformly positive benefits. Hence, when I was called in to see a case of this description, several months ago, I ordered the following:

℞. Tinct. cannabis indicæ..... ℥ lxxx.
Pulv. acaciæ..... ʒ ijss.
Syr. aurantii cort..... ʒ iv.
Aq. camphoræ.....q. s. ad ℥ iv.

M. Sig.—Tablespoonful every three hours until headache relieved.

"This prescription was used with decided benefit, the headache being most effectually kept under control by only a few doses as occasion required. Several weeks ago, having been out of the medicine for some time, the pain began to assert itself again, and the bottle was sent to the druggist for replenishing. The pharmacist, whom I know to be not only well educated, but a man of more than ordinary care and neatness, in some unaccountable way took the *fluid extract* of hemp of India, instead of the *tincture*, and filled the prescription. Consequently every tablespoonful of the mixture represented ten (10) minims of the fluid extract, equal to ten (10) grains of the solid extract. About an hour after taking the first dose she began to complain of a boiling sensation at the top of the head, and whenever she raised her eyes toward the ceiling a sensation as if the top of her head was being pulled off by someone standing behind her, and it was all she could do to keep from falling over backward. She lay down on a lounge in consequence, but the boiling, forcible beating, and lifting up of the vertex increasing, she resorted to another tablespoonful of the medicine. Her son, who was engaged in reading to her, was astonished soon afterward by being implored to hold her down, and not let her be pulled up into the air, and to speak louder and more distinctly. Her complainings growing more serious, he laid his book aside, and thinking to cheer her by conversation, he mentioned several little incidents which had occurred in the house that morning. To each and every one his mother exclaimed in a dreamy tone, 'Oh, tell me something new, that took place one hundred years ago.' Suddenly she struck her hand violently against the wall, sprang up with a wild and terrified cry, clutching her vertex with one hand and the precordia with the other, gasping for breath, and loosening her dress about the heart. 'I am dying, oh, I am dying,' she piteously gasped; then her face lightened up with a rapturous smile, she sprang to the unfortunate medicine bottle, exclaiming, 'Oh, what a perfectly lovely bottle,' and removing the cork, placed the bottle to her lips and took two swallows. 'Oh, how terribly hungry I am,' she exclaimed, as she set down the bottle, and coming to the table upon which stood the dessert for dinner, she began indiscriminately and rapidly to eat everything. Two medium-sized oranges were disposed of in a moment, rind and seeds; a large plate of cake followed; then a large dish of peanuts claimed her attention, putting three and four in her mouth at one time, munching as rapidly as possible, and swallowing shells and all. I was immediately sent for, as was her husband. When I arrived I found her hopping around the room in a perfect ecstasy of wild delight. She would suddenly elevate both arms above her head, beat the air like a pair of wings, give a spring upward and forward on one leg, kicking the other in the air, her face beaming with delight, eyes glowing and sparkling. Then, as if conscious where she was and who was about her, she would stop an instant, snap both thumbs, give us a contemptuous look, and resume her previous antics. Once she ran to her husband, fell upon his neck and, with a torrent of tears and hysterical sobs, besought him not to send her to an insane asylum. I spoke to her several times, asking her how she felt, and each time she acted as if her mind was confused, putting her hand to her head and saying, 'Oh let me think,' corrugating her brows and apparently struggling hard to recall something, but failing every time. While she was cogitating I noticed that her eyes were suffused, face flushed, her pupils evenly contracted and unresponsive to light. The pulse was beating 100 per minute, generally each wave of short duration, its volume small, very compressible, irregular both in length and force, besides being intermittent. The thermometer could not be retained in her mouth longer than one and a half minute, but in four or five trials always remained at 98⅘°. Sensation in hands and skin of forearms was markedly impaired. A prick of a needle that drew blood was not felt. Hands were cold to the touch. I had at first not the slightest idea what ailed my patient, but her husband called my attention to the fact that the second bottle of medicine was entirely different from the first, both as regards color and taste. Filled with the most serious apprehensions now, I directed her husband to take her out in the yard and walk her briskly up and down, while I took the bottle and hastened to the pharmacist. He was positive that he had made no error, and to prove it proposed immediately to compound the prescription and compare the two bottles; this was done, and on placing them side by side a startling difference was at once apparent. The poisonous bottle was of a dark-green color, whereas the one just compounded was very pale-green. The error then was discovered. What to do was now the question. Emetics first, to remove not only whatever poison might still be remaining in the stomach, but the mass of indigestible material which she had eaten, and free stimulation afterward; for if ever there was a pulse in which all the indications for stimulants were complete, then it was this one. So, armed with a solution of sulphate of zinc (ʒ ss. to ℥ iij. of water), and fortified with a big bottle of brandy, I hastened back to the house. I had been gone three quarters of an hour, during which time the patient had been walked up and down in the yard in a rain-storm. Most of the time she talked incessantly and incoherently, laughed idiotically, cried hysterically, screamed with terror, hopped with delight. Some of the neighbors were looking on; she recognized them, called them by name, and attempted to speak, but her utterance was thick, and ideas all confused, so that her sentences were not connected and bore no relation to each other. She was brought into the house upon my return. The stage of excitement had passed, and exhaustion or depression began to appear. I administered the emetic, and gave a half-pint of warm water with a heaped-up teaspoonful of strong mustard in it to drink; within five minutes she began to complain of intense burning at the pit of the stomach and copious vomiting ensued. Two teaspoonfuls of brandy were administered every half hour. She complained of a severe and continual pricking and tingling over the entire body, most marked in the hands and feet. Her tongue, mouth, and throat were

dry. She could not collect her thoughts sufficiently for any conversation, and seemed wild and distressed. She started up from the chair every few minutes, walked around the room beating and briskly rubbing her hands and stamping her feet. Her hands were cold, numb, slightly blue, and full of 'pins and needles.' Her feet were in the same condition. She was inclined to go to sleep each time upon returning to her chair. She mentioned that she could not feel her feet touching the floor distinctly as she walked. Pulse, 100, feeble, compressible, irregular, intermittent. Temperature, 98⅘°. Cutaneous sensibility on back of hands and forearms nearly normal. Late at night she was sufficiently strengthened and collected to give the following description of her sensations: 'About an hour after taking the medicine I began to experience a creeping sensation in the top of my head, as if a piece of thread was being drawn over the surface of the brain. This increasing in intensity, I felt as if the surface of the brain was working up and down against my skull. A faint tingling then became manifest in my fingers. Feeling that my head was growing worse, I took another dose of the medicine. My little boy was reading to me, and presently his voice began to sound afar off; I felt that I was rapidly getting farther and farther away from him, drifting I knew not whither, and that years had elapsed since last he had spoken to me. Presently he began to talk about some little things which had occurred that morning in the house, and I wondered how old they were, seemingly having occurred one hundred years ago. My brain now began to feel as if it were boiling, and frequently a sensation occurred as if the top of my head was lifted off, and the contents had boiled over. With each boiling over I felt as if a thousand needles were pricking me all over, more especially in the hands and feet, so that I was mortally afraid to move either for fear of running them further into me. Then my mouth and throat became parched, my tongue seemed to cleave to the roof of my mouth, the stinging in hands and feet became unendurable. Whenever I opened my eyes the whole top of my head fell off over backward, inclining me to fall over also, and a deathly sinking, fainting sensation ran through me. Then I lost all control over myself, a ravenous appetite took possession of me, and something within me whispered to take more of the medicine. I was fascinated immediately by its sweetish taste, and was drawn toward it by a force which I felt powerless to resist. I seemed to be conscious what I was doing, recognized everything about me, but could not control myself. I seemed to be myself and somebody else. After tasting the medicine and then taking two good swallows, I began to eat everything I could lay hands on. Then I was lifted up into the air, and thought I was in heaven. The whole earth was beneath me, I spurned it with my foot as dirt, and floated about in space, cognizant of all that was going on about me, but utterly indifferent and blissfully content. A feeling of great ecstasy ran over me at times, and I had to hop, dance, and cry out, for the joy was too great of being away from the earth. I seemed to possess two spirits, and to dwell in two different estates; dreamily conscious of those around me, yet dwelling amid visions of the sublime. I felt like speaking to those around, to come up to where I was and view with me the grand and gorgeous scenes, but the hopelessness of speaking through the immense space which separated us soon impressed itself upon me and I became silent. The most glowing landscapes were continually passing before my view like a panorama, each more gorgeous, grand, and sublime than the preceding. Gradually, however, they began to fade, I was approaching the earth, and once more felt myself among you.' The action of cannabis indica on the various structures and organs of the body may be summarily stated. 1. On brain and nervous system: In small doses it gently exhilarates the brain. In sufficient quantity the imaginative and emotional faculties are stimulated, then deranged—finally disordered. The conceit of the individual is markedly developed. The ideas pass through the mind in an overwhelming, continuous, rapid succession, but without any connection, and lead to no result beneficial to individual or community. The higher intellectual faculties, *i.e.*, memory, judgment, volition, are disordered. The special senses of sight and sound are disordered. The sensory nerves are rendered incapable of receiving or transmitting impressions. The brain is actively congested. No action on the reflex function of the spinal cord. The sympathetic system of nerves is stimulated. 2. On vascular system: The heart beats more rapidly, but it is due to weakness, *not* to increased force. The pulse becomes frequent, quick, small, compressible, irregular, and intermittent. 3. On respiration: None. 4. On temperature: None. 5. On digestive organs: No nausea excited; on the contrary, a great desire for food. No constipation follows its use. 6. On secretions: The salivary juices were diminished, producing dryness of mouth, tongue, and throat. No apparent effect upon gastric, biliary, or intestinal secretions. 7. On excretions: Urine increased in quantity, and had an odor of the drug. No diaphoretic action. Fæces natural in amount, color, and consistency."

THE CAUSE OF THE EXCESSIVE MYDRIATIC ACTION OF SOME SPECIMENS OF COCAINE.—At a meeting of the Paris Academy of Medicine Dr. Panas gave an account of some investigations undertaken at his suggestion to determine the cause of the excessive mydriatic action sometimes seen in cocaine. It was found that some manufacturers submitted the leaves to a second treatment, in a desire to obtain every particle of the alkaloid, and that during this process a new substance was produced. This second alkaloid was hygrine, a substance possessing marked mydriatic properties. In experimenting with two samples of cocaine, one of undoubted purity and the other presumably containing hygrine, Dr. Panas found a great difference in their mydriatic action. The first sample caused only a moderate dilatation of the pupil, while the second dilated the pupil widely, and its effects continued for forty-eight hours. The mydriasis of impure cocaine differs from that of atropine in that it yields quickly and entirely to the action of eserine, while the alkaloid of belladonna is only momentarily antagonized by this substance.

THE BRITISH PHARMACOPŒIA.—The new British Pharmacopœia will shortly be issued, and will contain, it is said, over one thousand preparations. A number of new drugs will be introduced for the first time, among which are apomorphia, pilocarpine, kairine, menthol, iodoform, the oleates, vaseline, thymol, salicylic acid, and the salicylates. Not very many of the present officinal drugs will be rejected, and it is expected that the Pharmacopœia will still contain a good deal of what some therapeutists call "rubbish." There is some talk of introducing the metric system.

THE OVERCROWDED PROFESSION.—Those who are disposed to find fault with the overcrowded condition of the medical profession in our country, may find some slight solace in the fact that matters are not much better in some other parts of the world. In Vienna this would seem to be especially noticeable. According to the *Progrès Medical*, physicians are more numerous in the Austrian capital than in any other city in Europe; there are ten times as many in proportion to the population as in London. This implies a dismal prospect for the younger men, who must be content with very modest fees. One practitioner (whose name is not mentioned) is credited with forty thousand dollars a year, but the rest "*ont tout lieu de désespérer.*" There is a great deal of complaint against the vast system of medical charities, which are extended indiscriminately and are taken advantage of by patients who are amply able to pay a physician.

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Original Articles.

THE ACRO-NEUROSES.[1]

FUNCTIONAL NERVOUS AFFECTIONS OF THE EXTREMITIES.

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SOME elaborate works have been written upon the subjects of the anatomy, physiology, and pathology of the hands and feet. So far as the last is concerned, however, systematic writers have discussed chiefly the surgery and the deformities of these members. It has occurred to me that it might be instructive to collect the numerous and wide-scattered contributions to the medical pathology of these parts. I have felt a particular interest in doing so from having met in practice types of many of these affections, and from having observed some forms which are apparently unique.

The hands and feet being highly specialized organs, are naturally subject to frequent and considerable changes in their blood-supply and nervous conditions. Besides their natural high sensibility and delicate mechanism they have certain anatomical relations, being remotely removed from the heart and nerve-centres, which put them at a disadvantage. Changes in circulation, secretion, temperature, sensation, as well as in motor power are therefore not rarely observed. All these changes, when of nervous origin and not due to any known organic disease, may be spoken of as neuroses of the extremities, or as acro-neuroses, a term which is convenient and quite as justifiable, it seems to me, as that of neuroses of the stomach, bladder, or any other complex organ.

Many peculiar neuroses of the extremities have been noted by physicians. Some of them may appear trivial, but in all cases they at times cause distress, and often such agony and misery as to interfere with the last two at least of the Jeffersonian functions, "liberty and the pursuit of happiness."

The different affections of the extremities which we may provisionally call neuroses can be with approximate accuracy classified as follows:

I. VASO-MOTOR AND TROPHIC DISTURBANCES.—Erythromelalgia; Digiti mortui, or dead fingers; local asphyxia; local syncope; symmetrical gangrene. All these constitute simply different types of Raynaud's Disease.

II. SENSORY DISTURBANCES.—*Paræsthesiæ:* Burning hands and feet (ignipedites); ordinary forms of paræsthesia.

Hyperæsthesia.

Neuralgias: Acrodynia; Ignipedites—a special constitutional disease; Reflex neuralgias; Morton's "luxation" neuralgia.

Tarsalgia; Pododynia, Talalgia, Policeman's disease; Spastic neuralgia of Mitchell—different names for same trouble.

III. SECRETORY DISTURBANCES.—Palmar and plantar hyperidrosis.

IV. MOTOR DISTURBANCES.—Hysterical, choreic, and epileptic movements.

I shall have very little to say, except about the vaso-motor and sensory troubles, since it is with perplexing types of these that I have personally had to deal, and it is concerning these that much confusion has existed.

I. *The vaso-motor and trophic Acro-neuroses, Digiti mortui, Erythromelalgia, Raynaud's Disease.*

CASE I.—A young man, about twenty-four years of age, whom I had been treating for spinal irritation of a depressive type, complained that on slight exposure to cold the ring-finger of one hand became white, waxy, and bloodless. It felt cold, and as though it were separate from the hand. After a time, the circulation becoming restored, there was a burning, tingling feeling experienced. Later the middle-finger became affected in the same way, and the trouble was progressively invading the whole hand when arrested by tonic treatment.

CASE II.—I was consulted by Dr. Richards, of Trenton, N. Y., about a young woman of a hysterical temperament. Her history was that after exposure of the hands to cold one of the fingers of the hand became for a time cold, waxy, and as if dead. Gradually the trouble extended until all the fingers of both hands became subject to these paroxysms of local syncope. There was no burning or pain, and no blueness or mottling of the skin. After a time, under the use of strychnine, quinine, iron, and phosphoric acid, she improved, but still suffers in a measure from the attacks.

CASE III.—A young woman, single, aged twenty-two, suffered three years ago from fugitive urticaria with intense pruritus, cured by jaborandi. She now complains of frequent attacks of headache. She also suffers from cold hands and feet. The fingers at times get white and waxy, feel dead, then they get blotchy and purple, and the hand swells. No sensory troubles in the intervals of the attacks.

These are cases representing different degrees of a morbid condition, known as *digiti mortui* or dead fingers.

It is not very uncommon in its mildest form, occurring chiefly in women, and in persons of a neurotic temperament. The severe type, in which the fingers and hands get blotchy, purplish, with trophic changes, is much rarer. It is then generally accompanied with burning pain, is more chronic in course and more intractable to treatment.

It then also is recognized under the name suggested by Dr. S. Weir Mitchell, of erythromelalgia, *i.e.*, the red neuralgia,[1] or under that of local asphyxia and local syncope, a name given by Dr. M. Renaud.

A bibliographical history of these morbid conditions is given later on. It appears to me from a careful reading of all of Mitchell's cases, and of many of Reynaud's, that these two observers have independently described closely allied, if not identical diseases.

I venture, however, to give a brief description of erythromelalgia, as observed by Mitchell, and also of local asphyxia, local syncope, and symmetrical gangrene, the periphrastical name given by M. Raynaud to what is better called simply "Raynaud's disease."

Erythromelagia is a painful affection of the extremities, generally of the feet, accompanied by a flushing and

[1] The word acro-neurosis is derived from the Greek word ἄκρον, extremity, and neurosis. The word ακρεα was frequently used by Greek physicians to denote extremities. Acrodynia from ακρος and οδύνη, pain, is a word first suggested by Chardon, and has become a part of medical nomenclature. So that I cannot be accused of coining a new word, but rather of employing a root already in accepted use.]

[1] From ερυθρος, red; μελος, a member; αλγος, pain. The condition was first described by Dr. S. Weir Mitchell, in the American Journal of Medical Sciences, July, 1878. Dr. Mitchell refers to somewhat similar cases reported by M. Grener, Le Bordeaux Médical, September, 1873; by Vulpian, Le Appareil Vaso-motor, t. ii., p. 623; and by Graves, Clinical Lectures, 1864, p. 826. Since his article other similar cases have been reported or referred to by Ross, T. B. Curtis, Charles K. Mills, and Woodnut. (See Bibliogr., History of Reynaud's Disease.)

mottling of the parts upon slight exertion. It may attack the toes symmetrically and progressively. The patient suffers from an intense *burning* pain in the toes, ball, dorsum, or heel of the foot, extending even up the leg. This pain is relieved by rest and the horizontal position. Trophic changes may finally set in, and evidences of organic spinal disease have been observed in some cases. The hands are sometimes involved, or are even the only seat of the disease. It occurs oftenest in males at the ages of twenty to forty, and comes on after prostrating fevers, severe exercise, or exposure. Dr. Mitchell found the disease very chronic and progressive, and not amenable to treatment.

Erythromelalgia is believed by Ross to be simply a form of sciatica affecting the plantar branches of the posterior tibial nerve. In a case under Dr. Ross' care, as in some of Mitchell's cases, the area of redness and burning corresponded with the distribution of these nerves.

The progressive and symmetrical character of the disease, the remarkable vaso-motor disturbances, the fact that the hands sometimes become involved, show that it is more than a form of sciatic neuralgia.[1]

Raynaud's disease.—Digiti mortui, local asphyxia, and symmetrical gangrene, or Raynaud's disease, belongs, as we have said, to the same category with erythromelalgia. The symptoms of a mild case have been given; those of a well-marked case are very striking. The patient suffers from paroxysms, in which the fingers, toes, and sometimes the ears, tip of the nose, and even tongue become white, bloodless, and feel cold and dead; or, in other cases there is a venous stasis, and the extremities become blue and mottled. As the attack subsides there is pain of a burning character, and often of a frightful intensity. Here we have, therefore, an erythromelalgia. In many cases the disease does not go any further than this, but after a few months gradually disappears. In other cases a symmetrical dry gangrene follows, or this may even come on directly. The gangrene is slight in amount, and rarely causes more than a superficial destruction of tissue. Sometimes the disease runs a very chronic course, lasting for years.

It occurs generally (in France at least) in women between the ages of eighteen and thirty. It seems to be caused in some cases by malarial poison. In two cases (Raynaud's and Barlow's) the patients had diabetes. It has been observed by Armaingand (*Rev. Sc. Med.*, x., 548) to occur as part of the phenomena of a hysterical attack. It occurs in functional paralyses of the arms. Finally, local asphyxia is one of the most marked features in one of the types of scleroderma. More than half a dozen observers, including Grasset, Hallopeau, and Bernhardt, have published cases showing this relation between local asphyxia and scleroderma, and maintaining that there is an essential unity in the pathology of the two affections.

We have, therefore, on one extreme scleroderma, a serious chronic trophoneurosis, and on the other the mild types of "digiti mortui," of slight significance.

In all these there is a tetanus of the peripheral vessels, due, no doubt, generally to an excess in reflex sensibility of the vascular apparatus, since the affection is symmetrical and paroxysmal. In some of the types sensory and trophic, as well as vascular, nerves may be directly involved.

What the cause of Reynaud's disease is we do not know. So far no organic lesion has been discovered. It does not seem to be of an infective character. It occurs in persons of an extremely mobile nervous system. Malaria or diabetes, exhausting diseases, over-work, and mental strain are concerned with the etiology in most cases. The disease can be easily distinguished from gangrenous ergotism, and from gangrene due to impaired nutrition, or to toxic agents of any kind, by its spontaneous development and its symmetrical and paroxysmal character.

Raynaud has stated that galvanic currents to the back and extremities are very efficient in treatment. These should be supplemented by rest, local stimulation, tonics, good food, etc.[1]

(To be continued.)

[1] A condition resembling erythromelalgia has been observed in arsenic poisoning by Dr. E. C. Seguin, Jour. Nerv. and Ment. Dis., October, 1882.

ON THE CLASSIFICATION OF DEAF PUPILS WITH A VIEW TO IMPROVE THE FACILITIES FOR THEIR EDUCATION, BASED ON THE CAUSES OF THEIR DISABILITY.[2]

By SAMUEL SEXTON, M.D.,

AURAL SURGEON TO THE NEW YORK EYE AND EAR INFIRMARY.

THE existence of deafness is not discovered even by discerning parents during the first few weeks of infancy, and what is frequently a mere suspicion in this regard at the sixth month may not become a painful reality before the child is expected to talk, and then the slowness of intellectual development may not be properly attributed to defective hearing. Partial, but disqualifying, deafness is thus liable to be overlooked until school education is attempted.

The detection of the very existence of hearing defects, it may be premised, is attended with difficulty, even by experts, during the earliest period of infancy, and even at the school age the exact degree of disqualification is not readily determined; it is with the view of affording

[1] HISTORY.—Perhaps the first case of Raynaud's disease was recorded by D. D. Hertius in the year 1684, in a note entitled, "De Ardore manuum ac pedum intolerabile," published in Miscellanea Curiosa, Academiæ Naturæ Curiosorum, Annus Tertius, Nurembergæ, 1685. Obs. civ., p. 203. Dr. Hertius says that he was called to see an unmarried woman, twenty-six years old, who was daily afflicted with a most intolerable burning or heat in the hands and feet, which yielded to no remedies. She finally was made so desperate by her sufferings that she would keep them in the coldest water. Eventually, gangrene of several of the toes and fingers set in. The gangrenous parts were amputated, and the patient finally recovered. Dr. Hertius, in the form of a "Scholium," gives a learned disquisition upon the pathology of this affection, but he throws no light upon it.

The subsequent history of the discovery and description of Raynaud's disease and its allied forms is of some interest.

A case resembling it was described by M. Bocquet in the Journal de Corvisart, 1808, t. xvi., p. 283, and referred to by François in an Essai sur les Gangrenes spontanées, Paris, 1832. A disease resembling local asphyxia was also described by Brodie in his Lectures on Local Nervous Disorders, 1837; also by Huston in 1836.

A disease more of a vaso-paralytic and neuralgic character, like erythromelalgia was described by Graves in the Dublin Journal of Medical Science, 1840, p. 257, 259, and in the Edinburgh Medical and Surgical Journal, 1849, lxxi., p. 238. In 1862 M. Raynaud (Thès. de Paris, 1862) gave a very complete description of the trouble, which he described as a local asphyxia of the extremities, of nervous origin, ending sometimes in gangrene or in slighter trophic disturbances. In 1872 (Nouveau Dict. Méd. et Chir. prat.) and in 1874 (Arch. Gen. de Méd.) he wrote of the disease again. Meanwhile many other observers have contributed facts and observations regarding it, viz.:

Nothnagel, in 1866, and Estlander, in 1870 (vid. Nouveau Dict. Méd. et Chir.).
Rey, 1869 (Arch. de Méd. Naval, 1869, p. 211).
J. R. Bigg (Lancet, 1870, vol. ii., p. 397).
Mourson, 1873 (Ibid., p. 364).
Allan McL. Hamilton (N. Y. Medical Journal, 1874, October).
Fischer (Arch. f. klin. Med., xviii., 2, 1875, p. 335).
Calmettes (Gaz. Méd., 1876, 44, p. 529).
Armaingand (Rev. Sc. Méd., x., 548), occurring in hysteria.
Lereboullet (Soc. Méd. Hop., March 22, 1878), occurring in brachial paralysis (Gaz. Hebd., 1878, 13).
Grasset and Apolinard (Grasset's Mal. de Ner. Syst., vol. ii., p. 244); occurring in brachial paralysis and scleroderma (Montpel. Méd., 1878).
Dr. T. A. McBride (MEDICAL RECORD, May 11, 1878), cases of digiti mortui.
Dr. S. Weir Mitchell (Amer. Jour. Med. Sci., July, 1878), describes erythromelalgia.
Dr. Chas. K. Mills (Amer. Jour. Med. Sci., October, 1878).
Bernhardt and Schwabach (Rev. Sc. Med., viii., 274).
Rapin (Ibid., viii., 275).
Wynn Foot (Ibid., ix., 225).
Dr. R. Southey (Tr. Clin. Soc. of London, vol. xvi., p. 167; St. Barthol. Hosp. Repts., vol. xvi.)
Barlow (Tr. Clinical Soc., vol. xv., p. 167, 1879).
Mr. Thos. Smith (Ibid., 1880).
M. Mourson, 1880 (quoted in Rev. de Chir., 1883, p. 5), digiti mortui of malarial origin.
Quinquand (La France Médicale, Sept. 6, 1881, p. 325), a form between erythromelalgia and scleroderma.
Weiss, of Prague (Zeitsch f. Heilk, 1882, vol. iii., p. 233).
Hastreiter (Wien. Med. Presse, 1882), twenty-two cases.
Mommsen, July, 1882 (Boston Medical and Surgical Journal, cix., p. 250), twenty-one cases.
Hélye (De la Malad. en. Algerie, p. 51), digiti mortui of malarial origin.
Petit and Verneuil (Rev. de Chirur., 1883) collect a number of cases illustrating the paludal origin of Raynaud's disease in its mild and gangrenous forms.
Dr. Lauer (Thès., Strasburg, 1884), two cases of Raynaud's disease.
Dr. Woodnut (Medical News, December 27, 1884, p. 717), case of erythromelalgia.
Dr. Colcott Fox (Lancet, May 30, 1885, p. 990), Raynaud's disease, with gangrene.
Dr. W. W. Johnston, in the American Journal of Obstetrics, April, 1885, p. 393, under the head of a Rare Form of Vaso-motor Neurosis, records a case of Raynaud's disease.

The cases reported are, for the most part, cases of local asphyxia or digiti mortui; others are illustrations of local asphyxia with symmetrical gangrene. Barlow and Petit and Verneuil, as well as Raynaud, give good cases of this kind. In still fewer instances the symptoms are more like those of erythromelalgia.

[2] Presented to the International Congress of Educators, New Orleans, 1885.

some aid to parents and teachers in this regard that this paper is written. In order to enhance the practical value of the views advanced, I have availed myself of notes that have been taken during an extended experience in the examination and treatment of the aurally defective.

The 450 cases of children's deafness selected as illustrative, are from among children seen in private and infirmary practice, and they represent almost every variety of disqualifying deafness. The defective pupils among this number were brought to me from both hearing and deaf-mute schools. A considerable number of these constitutes a class not properly provided for in either, being too deaf for hearing schools and yet not deaf enough to be taught as deaf-mutes; they were, therefore, found to be oscillating, shuttlecock-like, between the two, liable to be cast forth into life with much less education than their intelligence entitled them to receive —usually with scarcely intelligible articulate speech.

On account of their instructiveness, I have included in the cases above selected a few not strictly of the school age.

The cases may be divided into two groups based on their school status; thus 371 were attempting to retain their position in hearing schools, whilst 79 were either so deaf as to be excluded or were not of the school age.

The first group of 371 was constituted as follows: 74 were between five and seven years of age; 200 were between eight and twelve years of age; 97 were thirteen years of age and upward. As to sex, 199 were females and 172 were males. The causation in these cases could be traced to either purulent or non-purulent inflammation of the ear-drum (tympanum). In 219 cases it was the former, and in 124 cases the latter.

Usually both ears were similarly affected in each case, but where a purulent affection existed on one side and non-purulent on the other, the case was classed with the former. In the non-purulent cases both ears were almost without exception similarly affected, although the left ear was usually the worse of the two.

Belonging to either one or the other of the above varieties were 10 cases where the ear had been severely boxed or pulled, causing rupture or strain of the drum-head, and consequent deafness; 33 cases where cold sea-water had passed from the mouth up into the drum through the Eustachian tube, while the child was bathing in the ocean; 3 where water was introduced into the drum while sniffing it up into the nose, or in using the nasal douche. In 31 cases the cause was attributed to scarlet fever, in 17 to measles, in 5 to diphtheria, in 4 to whooping-cough, in 1 to mumps, and in 1 to syphilis.

The external auditory canal was obstructed in a number of instances, thus interfering with the entrance of sound; in 52 cases it was by wax, in 7 by foreign bodies, in 25 by narrowing of its walls by inflammation. Among the last named were 8 cases where the canal was ulcerated.

The drum-head gave evidence, on examination being made by reflected light, of defectiveness of the transmitting mechanism in a considerable number of cases. Thus, in 30 there was deformity of the membrana tympani from perverted development; in 27 cases there was greater or less destruction of the mechanism from suppurative inflammation; a polypoid growth sprung from the morbid tissues within the drum in 14 cases, and the inflammation extended from the drum to the pneumatic cells of the mastoid in 8 cases.

It is noteworthy that defective teeth were present in nearly every case, and 189 of them were specially bad. Head-catarrh and enlarged tonsils were present in the greater number, and in 13 cases either the nasal passages were so much obstructed, or the teeth so malformed, that mouth-breathing was habitual.

The affections thus far mentioned are those which interfere with the passage of sound to the middle ear and its transmission to the inner ear, but the deeper parts containing the distribution of the auditory nerve may, in the more severe cases of ear-disease occurring from scarlet fever, diphtheria, etc., be attacked at the same time. In 28 of these cases, it may be incidentally stated, either tumors, or abscesses, or wounds of the auricle from piercing for rings, were observed. Distress from the autophonia of ear-disease, the autophonous perception of voice and sounds arising from the performance of physiological functions of the circulation, respiration, and swallowing, were present in 41 cases, and dysacousma was present in 1. Pains in the ear (otalgia) were experienced by 28, pains in the aural region (neuralgia) by 36, ear-cough by 10, epilepsy by 1, vertiginous symptoms by 18, chorea by 2, and various other reflex phenomena by 17.

In respect to the degrees of deafness, 113 were almost totally deaf, while the remaining 258 were all of them incapacitated in some degree from receiving instruction at school along with good-hearing scholars.

The second group of 79 cases was composed mostly of so-called deaf-mutes; 38 were under five years of age, 21 between five and seven, 11 between 8 and 12, and 9 thirteen and upward. There were 41 females, and 38 males. Of this group, 18 were recorded as congenital deaf-mutes, but the diagnosis was in some of them considered doubtful; in 25 cases the trouble was traced to cerebral meningitis, in 19 to purulent inflammation of the drum, and in 17 to non-purulent inflammation of the drum.

In regard to their aural defectiveness, 26 of them were found to hear well enough to be taught *aurally* by the aid of a conversation-tube, or by using the voice close to the child's ear in teaching; 2 of them, although totally deaf, attended school along with hearing pupils; 4 of them retained speech after losing their hearing, and this without the aid of a teacher, and one of this number continued to use the English cockney accent which he had acquired before becoming deaf; in 17 cases the children were losing the speech they had acquired before becoming deaf, or were very defective in this regard from neglect to teach them. The younger children composing this last-mentioned class were nearly all of them backward in learning to talk; one of them did not acquire speech until his good-hearing brother became old enough to converse with him, and another did not talk until five years of age. Seventeen patients had never learned to talk, and a considerable number of these were considered mentally defective, solely on account of this defect, by their parents or teachers. In one case it was noted that the impact of sounds was painful (dysacousma).

It will be observed that in the greater number of all of the cases above presented, the cause of aural defectiveness was attributable to some inflammatory affection of the hearing organ. Thus *cerebral meningitis*, occurring in connection with children's diseases, contributed largely to this list; its invasion is always sudden, and it generally causes bilateral deafness. It does not give rise to running from the ears. Meningeal inflammation is usually meant when pachymeningitis, cerebro-spinal meningitis, brain fever, cerebral meningitis, convulsions, fits, and the like, are mentioned in this connection. Sometimes the symptoms of irritation of the stomach are so marked in meningitis that the case has been erroneously regarded as "gastric fever." Inflammation of the ear-drums, whether purulent or non-purulent, acute or chronic, leaves characteristic appearances which are easily recognizable. Among the smaller number there were some where the precise nature of the origin of the difficulty was obscure; following the usual custom, the writer, tentatively, relegated these to the somewhat vague realm of the congenitally deaf. Subsequent experience, and a more particular study of the subject, seem to show that in some of the instances of supposed deaf-born children, the disability should be assigned to extra-uterine causation.

Thus cerebral meningitis affecting the nerve of hearing, and suppurative inflammation of the drum of the ear af-

fecting the transmitting mechanism, consecutive to children's diseases, as scarlet fever, measles, and diphtheria, are frequently met with at the period in life when children are learning to talk, and the more carefully these patients are examined in this regard, the more frequently will it be found that deafness was first discovered to exist subsequently to some attack of this kind. In eliciting from parents the history of these cases, one should not place too much value on alleged injury to the ears from falls and blows on the head, which are often advanced as causes.

Acquired deafness.—Conditions favoring early deafness are not wanting—indeed causation may antedate or be encountered at birth, since at this period the drum in a normal state contains no air, but is filled with loose œdematous connective tissue, which slowly disappears when aëration of the cavity takes place with the establishment of the respiratory act, the cries, and the performance of deglutition by the infant. When action of the upper respiratory tract is defective, as it may thus be at birth, or, soon after, by head catarrh or by aural catarrh, the necessary aërial equilibrium is not established, and oscillations of the transmitting apparatus cannot take place. Under these circumstances the perceptive function lies dormant because it cannot be aroused to normal action.

Congenital deafness.—A tendency to propagate constitutional dyscrasias doubtlessly exists in some persons, and when predisponents to catarrh are active in such a case, hereditary catarrh may give rise to disease of the ear at the earliest period of life. This hypothesis is borne out by clinical experience. I have at the present time under treatment for aural catarrh a bright little lad three years of age, who cannot yet talk on account of this defectiveness. His mother informed me that she was exceedingly susceptible to head catarrhs, and the grandmother is so deaf that she has to carry about a conversation-tube. I was much impressed by these cases, and was even surprised when informed that my patient's great-grandmother was very deaf.

The possible effect of influences on the maternal progenitor are worthy of consideration. The following case in this connection is suggestive: The first-born child of a healthy, well-developed, and intelligent woman was, when six months of age, thought to be deaf, since she could only hear jarring of the floor and the like, and the sound of a high-pitched whistle which her father carried, and which seemed to become quite familiar to her ears. The mother had, however, during the first month of pregnancy an attack of rubeola, or German measles, and was, furthermore, much worried during the entire period of gestation about her husband, who was very nervous and becoming deaf from aural catarrh. When I examined this child at the age of sixteen months, it was found to have catarrh of the head and ears, the origin of which may have been embryonic. No anatomical malformation of the ears was discovered in the infant, nor was there any apparent transmissible organic defect in the parents.

Deafness due to congenital anomalies of the auditory apparatus.—These are supposed to be traceable to some perversion of development during the morphological state. The hearing organ in man has both an intracranial and extracranial origin, one centric and the other peripheric. From the auditory vesicle which constitutes the centric is evolved the nervous, or perceptive tract of the ear, while the first visceral cleft evolves the peripheric, or outer structures comprising the transmitting apparatus, namely, the Eustachian tube, the drum, and the external auditory canal and auricle. Now during the embryonic or fetal states, any interference with the development in either of these regions would produce defects in the hearing organ. Evidence of developmental defects is not always obtainable, and where the trouble is centric a diagnosis cannot be made in the very young, for obvious reasons. Evidences of peripheric defects, however, are by no means rare; these consist, for the most part, in either defective or excessive development in the closure of the first branchial cleft, the most common form of which is *fistula auris congenita.* The presence of these anomalies is very likely to be overlooked. In the following typical example they were not observed until several examinations of the ear had been made, their existence not being suspected at first: The case was that of a child of eight years of age. She was thought to be defective in intelligence until she was two years of age, since she did not learn to talk; but she grew more intelligent in appearance, and it was then found that she was deaf. When four years old some person undertook the task of instructing her during a long sea voyage, and she learned to spell and pronounce a few words. When five years old she was sent to the public schools in New York, and had made considerable progress up to the time when she was brought to me Examination of the hearing showed that she could not understand conversation in any tone at the distance of a few feet; but when her name was spoken in a smart tone she would promptly look at the speaker. She can hear the voice quite distinctly when the speaker is only a few inches distant. The teacher, for some reason, requires her to sit in the farthest seat from her desk. A minute fistulous opening is to be seen on the front part of both auricles, from which a small quantity of offensive fluid issues spontaneously at times, and usually on the right side, when the parts are pressed by the fingers. The external auditory canals are of the normal size, but the drum-heads are somewhat defective in appearance, the membrane being puckered at its anterior superior quadrant.

I have seen a very considerable number of these cases in adults, always where hearing was defective, and although generally unilateral, it is probable that in nearly all cases some degree of defectiveness exists on both sides. It seems probable that, where centric malformation exists, co-existent mental defects are liable to obtain, and we should, therefore, expect to find imbecility as well as deafness.

In the treatment or education of deaf children it is well to keep in mind the fact that defectiveness is not always absolute, and may, therefore, be amenable to treatment on the one hand, while not constituting an insuperable barrier to aural instruction on the other.

It would seem that the neglect of deaf-born children, in the lower order of social life, much more frequently results in dumbness than would occur if more pains were taken in their education; indeed, where the offspring of deaf-mutes are constantly surrounded by deaf-mutes holding converse with each other by signs only, it would be strange if they should learn to talk unless possessed of good hearing and allowed to associate with speaking persons. If children with defective hearing organs have but little, if any, opportunity to employ them, it is probable that continuous disuse of the sensory tract would finally lead to its deterioration. A child brought up under unfavorable conditions in this respect would acquire the use of the voice with difficulty, if at all, since even where normal hearing exists and favorable opportunities are afforded for learning, it is only after long and patient practice that intelligible speech is acquired.

The difficulties that beset partially deaf children where the defectiveness interferes with school instruction, admit of much easier interpretation than those of very young children. As regards the latter, inquiries as to causation are liable to be met by vague, unreliable, and even misleading statements, and the truth can only be reached by painstaking, eliminative analysis. Parents thus offer some entirely irrelevant accident, as an injury from a fall or blow, or an inconsequent trouble, as vaccination, or illness not affecting the ears, as causal, where examination often shows, after all obscurities have been put aside, that aural catarrh is the sole cause of the trouble, or that the case is congenital. It seems to offer

the ignorant much more satisfaction, in many instances at least, to regard deafness as a calamitous visitation, to account for which a striking catastrophe is required, rather than any natural, though much more simple, cause.

The dumbness of deaf children by no means always bears a constant relation to their aural defectiveness; a child intellectually bright, with favorable opportunities for learning, will make much more rapid advances than a child mentally dull and neglected. The writer has met with numerous examples where totally deaf persons obtained an excellent education in private hearing schools; they have been, of course, attentive and quick to learn, and special attention had been given them by teachers. This courageous achievement has been limited to the gentler sex, so far as my own observations have gone.

Dysacousma.—The painfulness of sounds to the perception of some deaf people is extreme. This is probably due to the sudden and unusual transmission of sounds which are felt at the perceptive centre as a shock. The low rumble of thunder, or the deep tones of an organ, are unbearable to some deaf persons, while others cannot endure a whispered sound when made directly into the ear.

If a medical writer might venture to offer a suggestion in pedagogics, I would urge early attention to home instruction for deaf children. Hearing children naturally pick up their earlier education without effort from parents or by themselves, but deaf children must be unremittingly taught at close range; words must be uttered directly into the ear, not loudly, but distinctly. Tubes are of value in conducting sound to the child's ear where close contact of the mouth is inconvenient, and the child should be encouraged to repeat its own words through the tube to its ears so as to compare its own voice with the instructor's. If this course be pursued early enough, I am convinced that but few children would be found without *any* hearing sense, and many who have considerable hearing likely to be lost from disuse would gradually be improved.

The greatest difficulty encountered at first is in overcoming inattention on the part of deaf children, who are disposed to rely on the sense of vision, since it offers so much easier a method of conversing. Much time is lost, I am convinced, from neglect to insist on this matter.

Where it is possible to avoid doing so, a deaf child should not be taught alone, but placed in company with hearing children. Instruction at school could with advantage be commenced much earlier than is done at present; some children are as capable of attending school when only three or four years old, as are others at a much more advanced age. Deaf children might, indeed, be made an exception of in regard to school age, since their training should begin so much earlier than hearing pupils. Where deafness has occurred after the pupil has learned to talk, unsparing efforts should be made to aid him in retaining this faculty, otherwise dumbness may result.

Olive-oil as a Menstruum for Dissolving Cocaine for Application to the Eye.—Dr. Joseph A. Andrews, of New York, writes: "In addition to the occasional benefit derived from the use of oil dropped into the eye in recent abrasions from burns, and in other painful affections of the cornea in which atropia is indicated and cocaine may likewise be serviceable, the plan of dissolving the cocaine in oil seems to insure a longer contact of the remedy, and a smaller quantity is required to effect anæsthesia. Neither the salt of cocaine nor that of atropine is soluble in olive-oil, but the alkaloid dissolves readily in this menstruum without the addition of alcohol, it being only necessary to expose the solution for a few minutes to a gentle heat in a water-bath. Castor-oil is not a desirable menstruum on account of its irritating qualities; and the oleate of cocaine, for the same reason, is still more objectionable as an application to the eye."

CHOLERA.

By MANKAN G. DADIRAIAN, M.D.,

new york, formerly of constantinople, turkey.

The cholera has been a great terror in this century, both among civilized and uncivilized nations. My intention in this article is to glance at the three following points:

First—How to escape it?

We see a prevailing belief in the minds both of the profession and the laity that the disease will surely visit New York this year. It may come, but it is hardly probable. Cholera may travel in three different ways: by human intercourse, by baggage—furniture, etc.—and by the air. Strict quarantine may prevent the spread of the disease by the two first-named agencies. The air is to be regarded as dangerous only for short distances.

The great benefits of quarantine can be explained by relating the circumstances concerning Constantinople:

Whenever cholera has appeared in Egypt or in Europe, it has always later appeared in Constantinople. Unfortunately, there has always prevailed in Turkey the belief that all plagues are scourges sent from God to punish human creatures and correct them. Therefore, it is not wise (say the people) to use any measures to ameliorate or prevent this punishment. "It is provoking the Almighty." Hence, though a show of quarantine has been kept up to distract the attention of the other European powers, passengers have been allowed to land without any precaution being taken; and, in its practical bearing, the whole thing has been a farce.

When the cholera was raging in Egypt, in 1883, the population of Constantinople was in great terror lest the disease should break out in their midst. All persons having diarrhœa were alarmed, and, contrary to their usual custom, at once sought medical treatment, thinking that the dreaded malady was upon them, and, in fact, many of the cases had a decided choleraic appearance. At this time the sanitary condition of the city was as bad as could well be imagined, but neither in that year nor the year following did cholera appear, though it was travelling along the Mediterranean shore, in Spain, France, and Italy. Why did it not visit the city in these years? For the following reason:

The present Sultan, Abdul Hamid, is an entirely different sort of a person from his predecessors. He believes that not only plagues, storms, earthquakes, etc., come from God, but that all insects, etc., come from Him: hence, he reasons, if we kill and drive away the latter, why should we not do all in our power to ward off the former. So he established a strict quarantine, and kept his palace in telegraphic communication with the quarantine stations, and in every way contributed to the efficiency of the service, rewarding faithful and punishing unfaithful subordinates. He even arrested some rich merchants who had evaded the watchfulness of the quarantine officers and violated the health laws. If the watchfulness of the Sultan has done all this, will it not be possible for the United States to be as careful as Turkey has been?

Second—What are the proper prophylactic measures during an epidemic?

They are simple, and can easily be followed out by all classes of people.

1. All rooms should be thoroughly aired and ventilated; also whitewashed. The utmost cleanliness should be maintained, particularly in halls and on stairways.

2. As few people as possible should sleep in the same room.

3. Bathing should be practised regularly.

4. Great regularity in eating should be followed. All salt and fat meat, salt fish, sausages, and raw fruit should be avoided. The Turkish Government exercises a rigid supervision over the sale of fruit, and all that is condemned is thrown overboard. Imprudence in the

use of fruit is one of the most prolific causes of the disease.

5. Great moderation in beverages is necessary. If possible, all stimulants should be avoided. A little wine with water is occasionally allowable. Ice-water and much ice itself are injurious. All water for drinking purposes should be boiled from ten to thirty minutes, and then passed through a filter containing several pieces of charcoal. Fermented milk is a valuable food, and stimulant as well. The writer presented a specimen of that used in Turkey at a recent meeting of the Academy of Medicine. Its acidity has a direct prophylactic effect, even after exposure to choleraic influences.

6. Both the mind and body should be kept in a healthy condition. Particular caution is necessary against excessive exertion, followed by sweating and subsequent exposure to cold in any form. No one should lie down or sleep before an open window.

Those who follow these directions rarely experience the disease. It is true that the percentage of mortality among those attacked is large, but the aggregate population should be reckoned in. The epidemic of pneumonia here in New York last winter carried off many, but they were those who exposed themselves to cold and severe weather. Some were too poor to properly protect themselves; others were careless for the sake of interest or pleasure. So with cholera. If you once contract it, the situation is alarming; but with proper precautions the chance of contracting it is not one in one hundred. And even after the disease has set in, it can generally be checked if prompt treatment be at hand.

To illustrate this point, the case may be cited of two hundred Armenians who went last year from Constantinople to Marseilles, where the cholera was then raging. These people were all well-to-do. Most of them had already seen several epidemics in the former city, and knew how to protect themselves and their children. Not one contracted the disease in their new residence. That most estimable gentleman, Dr. Cyrus Hamlin, who spent forty years in Constantinople, and who had a wide and interesting experience in different epidemics, says in his book: "If you prepare for it (cholera), it will not come. I think there is no disease which may be avoided with so much certainty. But providential circumstances, or the thoughtless indiscretions of some member of a household, may invite the attack, and the challenge will never be refused." The greatest danger lies in the contact with choleraic discharges. This danger is greater than that of contact with the patient himself. To avoid this danger the stools should be thoroughly disinfected, and the closets where they are emptied should receive a thorough charge of the disinfecting agent. The disinfectants that are always kept in the houses of Europeans residing in Alexandria are as follows: First, two parts of carbolic acid and one hundred parts of water; second, twenty parts of ferrous sulphate and one hundred parts of water; third, one part of chloride of lime and eight parts of water. Either one of these may be mixed with the dejecta in the proportion of one to ten, and greatly diluted with water for urinals and closets.

Third—The treatment of cholera. Without entering into the pathology and symptomatology of the disease, herewith is given the most simple and practical method of treatment which has yielded good results in Constantinople and Asia Minor. There are four stages of cholera, requiring each a more or less different treatment: (*a*) Choleraic diarrhœa; (*b*) true cholera, with rice-water discharges; (*c*) collapse; (*d*) reaction.

(*a*) Choleraic diarrhœa. This is the most important stage to be taken into consideration. At the first appearance of this symptom, treatment should be begun. Many are careless about the matter, and forfeit their lives in consequence, for this is the time when treatment is most efficacious. Sometimes this stage lasts one or two days; again only two or three hours, and then the succeeding stages follow with fearful rapidity. The patient must remain at home, stop his regular eating and drinking, and take as follows:

℞. Chloroform,
Laudanum.....āā ʒ ij.
Brandy..... ʒ iijss.

M. Sig.—One tablespoonful every two to three hours in water.

One dose will often stop the diarrhœa, but it is safer to continue the remedy in half doses until the next day. This is the method mostly used in the English Army in India. In Turkey, however, another mixture is generally used—known as "Dr. Hamlin's," as this gentleman introduced it in 1848 with great success. It consists of equal parts of laudanum, spirits of camphor, and tincture of rhubarb. Thirty drops of this mixture may be given in a little water, or on a lump of sugar. The diarrhœa is generally checked, and great relief is also given to the vomiting and colicky pains which are often present. The dosage may be doubled if necessary. This remedy also should be continued for a day or two in gradually diminishing dosage. The diet should be rice, soup, toasted bread, and fermented milk (matzoon).

(*b*) True cholera. Here we find cramps, colicky pains, vomiting, and diarrhœa. The stools may succeed each other at intervals of from ten minutes to several hours. In India calomel is used in this stage, in hourly doses of ten grains, till the stools present their normal color and odor. This remedy is not much used in Constantinople, where "Dr. Hamlin's No. 2 Mixture," as it is called, has worked charmingly. It consists of equal parts of laudanum, tincture of capsicum, tincture of ginger, and tincture of cardamom seeds. Dose thirty to forty drops in a little water, given after each movement. After the third dose both the diarrhœa and vomiting are usually stopped. In this stage sinapisms must be applied to the stomach, abdomen, calves, and feet. Diet: rice-water, crust wafers, chamomile tea.

(*c*) Collapse. Here spirits are our only sheet-anchor. Brandy or whiskey may be given every half hour in tablespoonful doses. Sinapisms, hot bottles, etc., are useful. The condition is one of the greatest gravity, but by no means hopeless. Many are pulled through.

(*d*) Reaction. As soon as the patient rallies, the treatment must be carried on entirely on general principles. After reaction has fairly set in, great care must be taken to prevent a relapse or a typhoid condition, which may prove fatal.

334 East Seventeenth Street.

Hot-water Applications in Hemorrhoids.—Dr. W. H. Bryant, of Savannah, Mo., writes: "In The Medical Record of May 9, 1885, Dr. Bennett gives a short article on the use—or rather abuse—of hot water in hemorrhoids. He makes no reference, however, to its local use, but refers to the popular custom of drinking hot water before breakfast. Many years ago it was the custom with all physicians to direct their patients suffering from piles to use ice or ice-cold water as a local application. Of late years I have been constantly using hot water as a local remedy, and find the relief is not only prompt, but a speedy cure is the result in every case in which I have used it. My attention was first directed to the use of hot water in the treatment of local inflammation by observing the benefit derived from vaginal irrigation as practised by Dr. Bennett in pelvic inflammations. The method of using the bath for either external or internal hemorrhages, is to direct the patient to sit over a bowl containing the water, as hot as the hand will bear, and with a soft cloth alternately dipped in the water and applied firmly to the anus. This should be continued for ten minutes, and repeated as often as every four hours. The first application gives prompt relief to the smarting and burning pain; twenty-four to thirty-six hours is sufficient to complete the cure."

WIRING OF FRACTURED PATELLA.

By FRASER C. FULLER, M.D.,

NEW YORK.

THE infrequency with which this operation is performed in this country, as compared with its performance on the other side, and in Great Britain especially, is sufficient excuse for the report of an individual case. Patellæ have been wired by several prominent surgeons in this city within the past year, and with excellent results, but as far as I know have not been reported in the journals as yet.

The case about to be described forms the fourth operated upon by the writer (for notes of first three cases see THE MEDICAL RECORD, December 22, 1883), and all have been eminently satisfactory, both in immediate and in later results, *i.e.*, no especial constitutional disturbance from the operation, primary healing of the soft parts, bony union of the patella, and complete retainment of function of the joint. The patient, G. S——, twenty-two years of age, was one in the practice of Dr. Moir, of Union Hill, N. J. He was a professional athlete. On March 15th last, while exercising on a horizontal bar, on jumping to the floor, he miscalculated the location of the padded mat beneath the bar, jumped upon its edge, his heels resting upon the mat, his toes upon the floor. It will be seen that the fracture occurred from muscular action. I saw him the next day, twenty-six hours after the accident, and proceeded to operate.

A transverse incision was made, the joint cavity cleared of fluid blood and blood-clots, and the thick, leather-like clots scraped from the bone-surfaces. Two sutures of silver wire were used for the patella, one seam of catgut for the joint capsule, another for the integument; one rubber drainage-tube was employed. It was not found necessary to ligature any blood-vessels. An ordinary dressing of iodoformized gauze and antiseptic cotton was employed, and a splint of wire netting. The limb was suspended and the foot elevated. The dressing was changed on the thirteenth day, and the tube removed; dressed again on the twenty-eighth day, and the soft parts found healed. Patient allowed to walk at the end of seven weeks, and he has now complete use of his limb, with almost entire return of function in the joint.

259 WEST FIFTY-FOURTH STREET,
June 15, 1885.

VACCINATION AND INOCULATION.—At a recent meeting of the London Society of Arts, Dr. Robert Pringle, surgeon-major in the Bengal army, read an interesting paper on the "Ancient and Modern Methods of Treating Epidemics of Small-pox in India." The ancient method was the practice of inoculation, the modern that of vaccination. Dr. Pringle's observations have extended over twenty years. He said inoculation had been practised in India from time immemorial.. The virus had, however, become attenuated by passing through many transmissions until the cultivated product resembled in its action cow-pox lymph, and caused only local symptoms at the part inoculated, and a small-pox eruption only exceptionally. The speaker said vaccination in India differed considerably from that in England. It could be practised only during the five cooler months of the year. Comparing inoculation with vaccination, he said that while the former kept up small-pox, it was nevertheless a boon to the population. It could be practised throughout the year, and need not be repeated as vaccination is. Dr. Pringle did not advocate revaccination—at least, he did not practise it. In his sanitary circle, with a population of ten millions, with two hundred operators working solely at vaccination for five months, it was impossible to reach a number equal to more than half the birth-rate. He therefore discouraged revaccination, and made quality and not quantity the basis of his work.

THE REPORTS OF THREE CASES OF WIRED PATELLAS.

By ROBERT T. MORRIS, M.D.,

NEW YORK.

THE three cases here described were operated upon by me in the winter of 1883–84.

CASE I.—P. C——, a strong and active fellow, twenty-seven years of age, fractured his left patella by muscular violence in 1872. He fractured his right patella by muscular violence in July, 1883. In December of the latter year he again, by muscular violence, separated the fragments of his right patella, tearing the fibrous band of connection. The patient walked two and a quarter miles after receiving this last injury.

All of the breaks referred to above happened as the patient struck on his feet after jumping from his carriage.

On examination, I found that the fragments of the left patella were two in number, of about equal size, and that the fracture was a transverse one. The fragments were separated by a distance of four inches when the knee was flexed, and a thin, strong, fibrous band extended between them. The patient believes that this leg, in this condition, is just as useful as it was before the injury.

On examination of the right knee-joint I found the ordinary results of such an injury as the knee had received. The two fragments were of nearly equal size, and were three-fourths of an inch apart. The fracture had been a transverse one.

In another similar case I should not wait for the swelling and inflammation to subside before operating, but here it was thought advisable to apply ice-bags and a posterior splint for a few days.

Eight days after the injury, the symptoms of inflammation having left the joint, operative procedures were resorted to. Working with scientific antiseptic precautions, I made a five-inch incision transversely across the knee, and opened up the joint widely. The ragged ends of a thin, torn ligament showed the character of the injury which had succeeded insufficient repair. The face of the lower fragment looked forward. The fibrous tissue which had united the two fragments was cut away, and a thin, dense layer of new bone removed from the faces of the two fragments. I then drilled two holes in each fragment, entering the drill at the upper margin of the upper one and at the lower margin of the lower one, and made the drill emerge at the junction of the bone with the cartilage on the fractured surfaces. Stout silver wire was passed through the drilled holes, and the fragments approximated as well as possible.

The cartilaginous surfaces touched each other, but the bony surfaces would do nothing of the sort; so I contented myself with twisting the wires together and then uniting with catgut the margins of fibrous tissues which hung over the edges of the little chasm.

A counter-opening into the joint was made at a point situated just above and in front of the point of attachment of the biceps tendons. A catgut drain was inserted into this lower opening, and at each angle of the upper opening a medium-sized rubber drainage-tube was employed.

Three lines of catgut sutures closed the wound. All blood and synovial fluid was washed out of the joint with 1–2000 bichloride of mercury solution.

Iodoform, Lister protective, bichlorided gauze, and an anterior plaster-of-Paris splint were employed in their respective order.

The limb was then suspended and elevated.

No inflammatory reaction followed the operation.

The patient's temperature went to 101½° F. on the day after the operation, but after a purgative had been given the temperature fell to normal, and stayed there until the wound had healed.

Twelve days after the operation, the dressing was changed for the first time and the two rubber drainage-tubes removed.

Primary union had united everything, except at one part of the skin-wound where the suture had slipped.

The dressing was changed with scientific antiseptic precautions, and the same material used for the second as for the first dressing.

Eighteen days after the first dressing the second dressing was removed and the fragments of the patella found to be firmly united. A splint was applied, and the joint kept at rest for about six weeks longer, passive motion having been made three or four times within this period.

No pus was found in either the first or the second dressing, and the few drachms of thick gelatinous discharge showed no sign of decomposition.

The patient began gradually to use his knee, and walked with a cane for several weeks.

More than a year has now elapsed since I last saw the man, and my efforts at finding him have been unsuccessful. To an acquaintance of mine, however, who recently met him, he said that the knee was perfectly well, and that he considered it to be as good as it was before the patella was broken.

The silver wires remain in place.

The union is probably fibrous, because the bony surfaces of the fragments could not be closely approximated.

At the time of operation it was hard to decide whether to cut through the quadriceps muscle, in order to allow the upper fragment to be carried downward, or to cut the patellar ligament, and allow the lower fragment to be pulled upward, or to unite the fibrous tissues about the patella, and trust to the getting of fibrous union—the bony surfaces at the point of widest separation being less than one-fourth of an inch apart.

The latter course was followed, and evidently with good results, but a case which I have since seen would bend me toward cutting the patellar ligament for the purpose of allowing the lower fragment to ascend in case it were impossible to get the fragments into close relation with each other without so doing.

The case in question is briefly as follows: Several months ago, a Mr. L——, of Connecticut, a Yale student, accidentally cut into his knee-joint with an axe, the cut severing the ligamentum patellæ at its point of attachment with the patella, and allowing that bone to be drawn up above the condyles of the femur. The wound healed, and the ligamenture structures which extend from the sides of the patella to the head of the tibia assumed the function of the destroyed ligament, so that the movements of extension are perfectly good, and the patient complains of the deformity from a cosmetic stand-point only.

Another interesting feature of the case which I may mention here is the fact that the skin which formed the lower margin of the wound is firmly attached by cicatricial tissue to the patella, and when the quadriceps group contracts this skin becomes extremely tense, and aids in flexing the leg by virtue of its close attachment about the tuberosity of the tibia.

The point at once suggested itself to me that in any case in which it is necessary to excise the patella a strip of skin could be turned up from the anterior portion of the leg just below the knee and sutured to the tendinous portion of the quadriceps which had previously been attached to the patella.

This operation, I think, has never been done because the tissues to be sutured together are so unlike that operators have not supposed that a usefully strong union would follow.

The case above-cited seems to open up, therefore, two good points for surgeons.

Case II.—George K——, fifty-two years of age, slipped while walking and struck his right knee against the curb-stone. I saw him a few hours later, and found that he had fractured his right patella transversely. The fracture separated the bone through its middle, and a hazel-nut-sized piece was broken from the lower fragment. The knee was swollen and contused, and extremely painful to the touch. A posterior splint and ice-cap were employed for two or three days, and then the limb was immobilized for a week with a plaster-of-Paris splint. At the end of that time the swelling and tenderness had disappeared to a great extent. The splint was removed and the case operated upon.

My first incision was a vertical one, extending over the front of the knee. This incision not giving sufficient room for working, I made a five-inch-long transverse incision which passed across the knee between the two larger fragments of the patella. A large and firm blood-clot was found between the fragments, and the joint capsule was turned over upon and united to the fractured surface of the lower fragment in such a way that almost no fresh surface was left for the helping out of reparative processes. There then were found two mechanical obstacles to repair. Another obstacle depended on the position of the lower fragment, the fractured surface of which looked forward. A counter-opening was made at the most dependent part of the joint, and the whole joint cavity thoroughly washed out with carbolic acid solution (1 to 40). At the termination of the operation a final flushing of the joint was made with 1 to 20 carbolic acid solution. This last step was a mistake. Don't do it.

The drill was passed through the fragments in the same way as described in Case I., and the silver wires when inserted held the fragments in close apposition. Three lines of catgut suture were used. One layer for the cut and torn capsule, another for subcutaneous tissues, and another for the skin. Drainage was provided for with absorbable bone-drains, and with a small bunch of catgut. The wound was dressed with iodoform, Lister protective, carbolized gauze, and borated cotton. An anterior splint of plaster of Paris and wire gauze was applied, and the limb suspended and elevated.

A few hours after the operation, the patient's temperature arose to 99½° F., but on the following day it was normal, and remained below 99½° F. until the wound had healed.

Two weeks after the operation the dressings were changed for the first time. Everything had united by primary union, but a narrow line of granulations marked the course of the vertical incision. The drains and sutures had been completely absorbed. No pus was found in the dressings. The dressing and splint were reapplied and allowed to stay for three weeks, after which time passive motion was begun. The fragments of the patella had grown firmly together, and the patella as a whole was movable to a moderate degree. The movement of flexion at the knee was, however, very limited, and subsequent treatment by massage, hot and cold douching, tincture of iodine, and passive movement failed to get good motion. The patient at the end of a year is not able to place the right foot on a stair above the left foot.

Why this knee should be so stiff I cannot imagine, as no inflammation followed the operation. Perhaps the strong carbolic acid solution was a factor, and perhaps earlier passive motion would have helped matters. The patient is satisfied with the result, and complains little of his unbendable legability. The wires which remain in the patella have made no demonstration of their presence.

Case III.—S. T——, twenty-six years of age, had strumous arthritis of the left knee-joint. The disease was in its first stage. I felt a couple of cartilaginous prominences in the joint, and behind them to be attached morbid growths of cartilage. I did not know that the disease was strumous arthritis, and opened the joint in the expectation of removing the cartilaginous knobs in question. The latter, however, proved to be normal, and stood out prominently, because the cartilage about them had been absorbed. Finding that the whole surface of the synovial membrane was a mass of vascular fringes, I made a long transverse incision across the knee, sawed through the patella transversely, and then opening

the joint widely, trimmed away the synovial membrane with curved scissors. The lower fragment of the patella seemed to be forward after division of the bone. The patella was wired as the other two had been, and the fragments evidently united by primary union, as at the end of a month after the operation the line of separation could not be found.

Professor Volkmann, of Halle, who has frequently performed the operation just described, tells me that he has never seen a case in which the fragments of the patella failed to unite with complete bony union.

As to the advisability of wiring simple fracture of the patella, I do not wish to express an opinion as yet. There is very little danger connected with the operation, provided that the operator understands some scientific antiseptic method of working. Surgeons who do not work antiseptically will, of course, leave the knee-joint severely alone.

Clinical Department.

ACUTE INFLAMMATION OF THE THYROID GLAND.

A CORRESPONDENT, Dr. C. L. Lang, of this city, sends the following account of a case of this rare affection. A Bohemian woman, thirty-seven years of age, in the eighth month of pregnancy, was attacked with pneumonia. She was delivered of a living child on the second day of the disease, but the course of the pneumonia was favorable, and at the end of two weeks the patient was able to walk about her rooms. The temperature, however, remained from 1° to 2° above the normal, and there was some hectic, but careful examination failed to reveal any mischievous process in the lungs. After a few days she began to complain of pain in an old goitre, which had existed eleven years, and had never before given her any trouble. The inflammatory process went on to suppuration, an abscess formed and opened, and from that time convalescence was rapid and satisfactory. The chronic enlargement of the thyroid gland dated from the birth of the patient's first child, but had not been influenced by any subsequent pregnancies, of which there had been five. It was situated chiefly in the right side of the neck, extending but little beyond the median line. During the period of acute inflammation prior to the opening of the abscess the patient complained of dysphagia and dyspnœa when in the recumbent posture. About four ounces of pus were discharged when the abscess opened.

AN ANTISEPTIC OINTMENT.

DR. M. B. WARD, of Topeka, Kan., sends the formula of an antiseptic ointment which he found very useful while in charge of the hospital department of the Mexican Central Railway. It consists of iodoform, 3 j.; subnitrate of bismuth, 3 vij.; vaseline, ℥ ij. This formula was not strictly adhered to in all cases, but was varied according to individual indications. Another formula, suggested by Dr. J. W. Thayer, was iodoform, 3 j.; boracic acid, 3 ij.; subnitrate of bismuth, 3 iv.; vaseline, ℥ ij. The ointment was spread upon a sheet of absorbent cotton sufficiently large to cover the wound and a considerable extent of surface around it. "The dressing seemed to be the best suited to the after-treatment of amputation wounds. It could be removed when necessary with the greatest facility, as it never adhered to the wounded surface. I usually allowed the first dressing to remain undisturbed for from four to six days. There never was present, even in the warm climate of Mexico, the least disagreeable odor, so common when carbolic dressings are used." This dressing was used in over four hundred cases of injuries of various kinds, including ten gunshot wounds and numerous amputations and other capital operations, and of this number there were but two deaths. The writer adds that Dr. J. W. Thayer, of Chihuahua, Mexico, will be pleased to give a detailed account of the results obtained by this method of dressing to anyone wishing the same, as he is in possession of the clinical records.

COCAINE IN THE MORPHINE HABIT.

DR. J. T. WHITTAKER, at the Cincinnati Academy of Medicine, June 29th ult., reported on the use of cocaine in the morphia habit. He used it in a patient who was a confirmed morphia-eater, and had suffered one relapse. He gave ten drops of a ten per cent. solution, equal to one grain. The patient immediately arose to a degree of exhilaration. In one or two hours the uncomfortable sensations returned with as much force as ever. He repeated the injection three times in the next twenty-four hours. In two hours at the outside the desire would return. The patient has now had no desire for the morphia for two weeks. She is loud in her praises of the relief from cocaine. The cocaine gives only temporary relief, yet the Doctor thought it one of the best remedies we have.

Progress of Medical Science.

COCAINE IN VENEREAL AND SYPHILITIC DISORDERS.—The experience of Bono with cocaine in affections of the genital system can be conveniently epitomized as follows (*The Therapeutic Gazette*, June 15, 1885): 1. An injection of a few drops of a two per cent. solution of cocaine removes promptly the pains felt in acute gonorrhœa during micturition and erection. The injection has to remain in the urethra for at least five minutes, and to be repeated four to five times daily. 2. This cocaine injection is unrivalled in rendering caustic injections or the introduction of the catheter painless. 3. The burning pains of blennorrhœa in women yield invariably to small cotton tampons saturated with a two per cent. solution of cocaine, or to the application of a five per cent. cocaine ointment. 4. Cocaine facilitates the examination of urethra and bladder with the bougie and the endoscope. 5. It allows of a painless cauterization in balanoprostatitis. 6. Pointed condylomatæ can be painlessly cauterized, excised, or scraped out with its aid. 7. In cauterization and excision of primary syphilitic affections, cocaine evinced very desirable analgesic virtues of a sufficiently long duration. 8. Taken internally during an antisyphilitic treatment, cocaine did not present any appreciable effects. 9. Its local effects are highly beneficent in syphilitic tonsillitis and in stomatitis mercurialis, and difficulties of deglutition.

FERRÁN'S INOCULATIONS NOT HARMLESS.—A correspondent of the *British Medical Journal* (June 6, 1885), writes from Valencia as follows: "I now come to the most painfully interesting part of my letter, referring to the inoculation by Ferrán and others, and its results. The landlord of the hotel at which I stayed brought to me a lady friend of his, aged thirty-four, very stout and robust, who had been re-inoculated, the last time on May 14th. Her right arm presented a deep erysipelatous circle at least four inches in diameter, in the centre of which a huge phlegmon had formed and burst, and had completely tunnelled through the triceps to the bone, discharging copiously a sanious purulent fluid; the bore of the tunnel was nearly half an inch in diameter; she had violent fever. This case I saw twice, and the last time she was in a sorry plight, her whole arm to the shoulder being in great pain and utterly useless. The second case I saw was the sister of Dr. Serra, chief medical officer of the hospital, brought to me by himself. She had been re-inoculated four days previously, and unbinding the bandage from her painful and useless right arm, I saw, at the bend of the arm, a huge phlegmon, with its large fiery erysipelatous blush, similar to the first case; as yet the phlegmon had not burst. The

third case was a strong healthy woman, who had been re-inoculated, three days previously, in both arms. She was in bed, utterly helpless, with violent fever, both arms enormously swollen, and progressing to suppuration, precisely in the same form and extent as Case I. I was told of many cases which had been similarly affected, and that several had died. I have heard of great numbers being more or less affected in Valencia, in the same way, after the inoculation."

THE VALUE OF CASCARA SAGRADA IN CONSTIPATION.—At a recent meeting of the Staffordshire Branch of the British Medical Association, Dr. Reid read a paper upon the value of this drug, based on an analysis of thirty-three cases, of which he had taken careful notes. He found: 1, that the result was all that could be desired in twenty-seven cases of obstinate and habitual constipation, complicated in many cases by various forms of dyspepsia, and in many people usually of sedentary habits, more especially females; 2, that the effect was most beneficial in three cases of hemorrhoids; 3, that the drug was of no service, even in very large doses, in one case of obstinate constipation, although it did not cause pain; 4, that it had to be discontinued in two cases on account of its causing pain and sickness. The form of drug used was the fluid extract. The conclusions arrived at were as follows: 1. Cascara sagrada was a most useful remedy, both regarding its immediate effects and after-results in obstinate and chronic cases of constipation. 2. It was better to prescribe it in continuous small doses rather than in occasional large ones. 3. Cases were met with in which, even in large doses—at any rate, in the form of the fluid extract—the drug had not been of service. 4. No rule could be laid down by which one could ascertain previously whether the drug would suit or not; but, when pain was produced, in all probability it was owing to too large a dose being given. 5. It was of great service in cases of hemorrhoids when other aperients had failed.—*British Medical Journal*, April 11, 1885.

THE FREE USE OF CAUSTIC POTASH IN THE TREATMENT OF CANCER OF THE CERVIX UTERI.—At a recent meeting of the Medical Society of London (*The Lancet*, May 9, 1885), Dr. Herbert Snow read a paper on the free use of caustic potash in the treatment of cancer of the cervix uteri. He reviewed the statistics of extirpation of the uterus, and showed the severe mortality which followed the abdominal or the vaginal operation. In many cases the écraseur was unable to remove the whole of the disease of the cervix uteri. The actual cautery had too superficial an action to be of any great service. Chloride of zinc caused much pain and distress, which lasted a long period. These objections did not hold with regard to potassa fusa. Half an hour or an hour was recommended to be spent in the employment of successive sticks of potassa fusa, for the treatment must be thoroughly carried out. None of the cases suffered from peritonitis; and unless the patient get up too soon after the operation, nothing distressing need be feared. All the cases were greatly benefited, and no alarming symptoms were encountered. Fixation of the uterus and infiltration of the vaginal wall were regarded as prohibiting the employment of this method of treatment. It was only by degrees that he had ventured to apply the caustic so freely as he now advocated. He illustrated the paper by narrating several cases in which the treatment had been adopted. The object of the paper was to show that potassa fusa could do all that the vaginal cutting operation could perform without running the risk of the severe operation.

RECENT EXPERIMENTS ON THE SEVERED HEADS OF CRIMINALS.—The Paris correspondent of the London *Lancet* (May 9, 1885) writes as follows concerning the above: The question has again been mooted as to whether those who have been decapitated suffer; and after additional experiments on the head of Gamahut, who was guillotined on the 24th ult. for the murder of a widowed lady in Paris, coupled with those related by Claude Bernard, the presumption is that they do, for under the influence of transfused blood the blanched features recovered almost their normal expression, the eyelids were slightly open, and the lips quivered for a few seconds, as if to express some perception communicated from the brain. The conclusion, then, is that, so long as the brain contains any blood, the head of the decapitated person, which falls into a receptacle prepared for the purpose, is capable of seeing, of hearing, and of knowing that it is separated from the body. This view, however, was repudiated by Professor Vulpian at the last meeting of the Academy of Medicine on the following grounds: A strong blow applied to the head, or a less severe one to the stomach, would cause instantaneous syncope; that is to say, consciousness would for the moment be entirely abolished. So it would be in the case of the severed head, but of course without any possibility of recovery; the weight of the guillotine falling upon the neck would produce the same result. Moreover, syncope would be occasioned by the sudden division of the carotid arteries, and the consequent emptying of the arterial system of the brain. Therefore, at the very moment that the brain ceases to receive the vivifying fluid from the heart, it loses all power of excito-motility, as well as all power of sensation; all this transpires as quickly as thought, and its duration may be compared to a flash of lightning. It happened opportunely that a dog that was undergoing some experiments in Professor Vulpian's laboratory was suddenly seized with hemorrhage. Advantage was taken of this circumstance to immediately expose the brain and submit the latter to faradization. Scarcely half a minute had elapsed between the arrest of the circulation and the galvanic irritation. It was impossible to obtain any movements in the legs. The effects of the electricity produced in the muscles of the head and nose were not, according to Professor Vulpian, due to the physiological transmission effected by the brain, but to the neighborhood of the source of irritation; the brain, having lost all power of excito-motility, would in this case act as a mere sponge; and if such a condition was found to exist for only half a minute after the arrest of the circulation, the interpretation put on the effects said to be produced on severed heads by other experimenters must certainly be considered erroneous.

ATROPHY OF MUSCLES IN PLEURISY.—When synovitis attacks a joint, the muscles which effect the movements of the articulation are prone to waste in a rather rapid manner. The muscular atrophy cannot reasonably be explained on the ground that the muscles are not used, for the atrophy is one which recalls the wasting of muscle seen in cases of infantile palsy, not only in the rapidity with which it occurs, but also in the behavior of the affected muscles to electrical examination. The wasting of muscles of the shoulder and thorax on that side which has been the seat of pleurisy seems to us to belong to the same category of phenomena as the wasting of muscle from joint disease; and although the comparison is a trite one, yet we may remember that serous and synovial membranes are regarded as analogous structures. The subject of muscular atrophy resulting from inflammation of tissues in the neighborhood of the muscles is one deserving of much attention. The most probable explanation is that the abnormal excitations proceeding from the inflamed tissues along the sensory nerves have a direct influence on the motor nerve-cells controlling the nutrition of the muscles concerned; the bones may waste as the result of a similar "reflex" influence. A valuable paper on the atrophy of muscles of the thorax and shoulder in pleurisy was recently contributed to the Société Médicale des Hôpitaux. The author of the paper, M. Desplats of Lille, contends that the muscular atrophy is rapid and frequent in the subjects of pleurisy, that the atrophy plays an important part in the deformities of the skeleton resulting from pleurisy,

and that the atrophy is the indirect cause of tuberculosis of the lungs. He recommends that the atrophy should be prevented from coming on by early surgical treatment of any pleuritic effusion, and that measures should be adopted for arresting or combating the atrophy by the use of general and local stimulants, and more especially by faradization, respiratory gymnastics, compressed air, and so forth.—*The Lancet*, May 7, 1885.

Spontaneous Disappearance of Diabetic Cataract.—At a recent meeting of the London Ophthalmological Society, Mr Nettleship read a note on the "Spontaneous Disappearance of Diabetic Cataract." So far as his literary researches went he had found that cases of the kind were very rare. Two cases were detailed in Dr. J. Seegen's work on diabetes mellitus. Seegen's first case was that of a man aged thirty-nine, who in July, 1863, about six months after the appearance of diabetes, noticed that his sight began to fail; the lenses were cataractous and hazy. Under treatment at Carlsbad the lenses cleared; the quantity of urine was reduced to one-half, but the percentage of sugar remained the same. In the spring of 1865 the lens again became opaque. The second case was that of a woman aged fifty-five, who was first seen in the autumn of 1867, soon after which the sight began to fail and became misty; she was treated for diabetes in February, 1868, and whilst under treatment the lenses became clear again. Dr. Tannahill's case was that of a coal-miner, who was seen while in prison. He had suffered from diabetes for eleven months; both lenses were opaque throughout, the left more than the right. He was put on the ordinary diabetic diet, and had two grains of opium daily. Whilst under treatment his sight began to improve, the opaque lenses gradually cleared, and on inspection when he was discharged from prison no trace of cataract remained. No satisfactory explanation had yet been offered as to the cause of diabetic cataract. The view that the lens contained sugar was a possible explanation, but the idea of a permanent degeneration was not borne out by the facts just narrated; moreover, there was a reappearance of the cataract in one case. The abstraction of water from the lens owing to an increased density of the blood or fluids surrounding the lens was a likely explanation.

Fracture of the Larynx.—An instance of this rare accident is described by Dr. Berry (*The Lancet*, May 23, 1885). During the afternoon of February 6th, the doctor was called to see G. L——, aged twenty-one. He was reclining on a sofa, looking very pale. Extending from the tip of the chin to just above the hyoid bone was a superficial wound. The voice was like that of laryngitis. The prominence of the thyroid cartilage was gone. Placing his hand over the throat and requesting the patient to swallow, the Doctor detected unmistakable crepitus of the moving larynx. A more careful examination revealed what felt like a separation of the wings of the thyroid cartilage. The history of the accident was briefly this: About twenty minutes before Dr. Berry saw him he was working a circular-saw, and was suddenly struck in the throat with great force by a large piece of wood coming from below upward. For a few moments he had a hard struggle for breath, but managed to keep from falling by leaning against a bench. Water was brought to him, but he declined it, as he feared it would choke him. With the help of two men he walked home, a distance of about five hundred yards from his work. Having applied a warm-water dressing to the throat, the patient was put to bed, his head and shoulders being raised. An hour later the Doctor saw the patient again in conjunction with Mr. Chaffers, whose help he sought when he saw the case was of such gravity. His diagnosis was confirmed, and seeing the patient was free from urgent symptoms, the breathing being quiet and full and the condition of shock gradually passing off, the physicians considered it best to continue the warm-water dressings and forbid anything being taken by the mouth except ice, leaving word that any change in the breathing should be immediately reported to them. About 1.30 next morning Dr. Berry was called up, as the patient was reported to be choking. After sleeping for about an hour and a half, during which time he breathed rather noisily, he woke up somewhat suddenly and at once began to struggle for breath. When the doctor arrived he was unconscious, the eyes were open and fixed, the pupils dilated, the face pale, and the deep spasmodic efforts to breathe were failing. Having sent for Mr. Chaffers, Dr. Berry at once performed laryngotomy. Still no air seemed to enter, and no mucus escaped from the tube. Having satisfied himself the tube was clear and that no blood was obstructing the air-passages near the wound, he enlarged the opening and replaced the tube, with no better result, death taking place after a few more respiratory efforts had been made. Half an hour after death Mr. Chaffers and himself examined the larynx and trachea as well as they could through the operation wound. Besides the separation of the wings of the thyroid, oblique lines of fracture were made out on each side, through the wings themselves. Within easy reach of the finger, hanging down the trachea by a mere shred of fibrous tissue was a part of the left wing of the thyroid cartilage itself, the size of a finger-nail, apparently the lower front angle; this was easily removed. No autopsy was allowed. During life, there was no spitting of blood, and after death perfectly white frothy mucus welled up from the throat.

Position of the Fetal Head at Term.—As an inaugural thesis in the University of Dorpat, L. Brühl has published some observations on the position of the fetal head and the extent of its entrance into the pelvic cavity at term. In primiparæ the greatest circumference of the head was found to have passed the brim at the end of pregnancy in half the cases. In multiparæ it only reached the pelvic cavity in a fourth of the cases. The reason of the difference is to be found in the greater elasticity of the abdominal wall and of the uterine ligament in primiparæ. In contracted pelves, where the conjugata vera measured less than ten centimetres in primiparæ, the head entered the cavity in only a third of the cases, the greatest circumference in scarcely any passing the brim, and in subsequent pregnancies the position of the head became higher more rapidly than was the case in normal pelves. The prognosis of labor depending upon the relation which exists between the fetal head and the maternal passages, it is the practice in Berne, where these observations were made under the supervision of Professor P. Müller, to grasp the fœtus through the abdominal wall and force the head as far as possible into the pelvic canal at the completion of pregnancy. Generally, when the head has more than half entered the pelvic cavity, one can predict that birth will take place naturally. On the other hand, it is by no means necessary to infer that instrumental interference will be required in all cases where the head has entered the canal to only a slight extent.—*London Lancet*, May 30, 1885.

The Elimination of Arsenic.—The Paris correspondent of the *Lancet* writes that at the last meeting of the Paris Society of Medical Jurisprudence, Professor Brouardel reported a case illustrating the possibility of an infant at the breast being poisoned through its mother's milk. In his capacity of medical jurist he was consulted about a case which was lately brought before the tribunal, in which a man was accused of having attempted to poison his wife with arsenic, which he gave her in her food, she having at the same time a sucking baby. The infant was seized with symptoms of cholerine a few days after the mother had been affected in a similar way—diarrhœa, vomiting, etc., from which it died. These symptoms having occurred during the hot season, no importance was attached to them; but in the month of November following, the wife and mother-in-law of the accused having been again similarly affected, suspicions

were aroused, and Professor Brouardel caused the body of the infant, which had been buried six months, to be exhumed. According to the Professor's report, the body was completely transformed into cadaverous fat, and it was impossible to isolate the viscera from the other parts, so that the body had to be analyzed *en masse*. It weighed about two and a half kilogrammes, and contained five milligrammes of arsenic. Means had been taken to make sure that the arsenic did not come from the linen enveloping the corpse, nor from the earth which surrounded the coffin. The question then suggested itself as to whether the arsenic found in the body of the infant might not have been eliminated by the milk of the mother. To ascertain the possibility of such a circumstance, M. Gabriel Pouchet performed some experiments which were very conclusive. He administered to a certain number of wet-nurses, who were in the St. Louis Hospital affected with skin diseases, from two to twelve drops of Fowler's solution, and he ascertained that in these conditions the milk of the nurses always contained a relatively large quantity of arsenic; thus, the milk of one nurse, who had taken eight milligrammes of arsenic in six days, contained one milligramme of the metalloid to one hundred grammes. M. Pouchet observed that these doses did not affect the nurses or their nurslings in the least. But upon the supposition that the result might be otherwise if a large dose of the arsenic were administered at once, and in order to clear up this point, M. Pouchet tried experiments on some females among the lower animals. This series of experiments did not furnish conclusive results, as animals present a variable degree of susceptibility to arsenic, and it was therefore impossible to draw any comparative conclusions. It may, however, be deduced from these researches that the elimination of arsenic takes place principally through the milk, and it is therefore prudent never to administer arsenic to mothers suckling infants.

Rheumatic Epilepsy.—At a recent meeting of the Société de Médecine de Lyon, M. Teissier called attention to gout and rheumatism as possible factors in the etiology of epilepsy. He related several cases in which persons suffering from these affections had one or more epileptic seizures, and other cases in which epilepsy existed in young persons, members of a rheumatic family. In all these instances the attacks were promptly arrested by bromide of potassium. The author referred to reported instances of epilepsy occurring at the menopause, and suggested that they might also be regarded as of rheumatic origin.—*Journal de Médecine et de Chirurgie Pratiques*, April, 1885.

Terpine and Terpinol.—Terpine is a substance obtained by distillation from turpentine. It exists under the form of clear prismatic crystals, sometimes of large size, soluble in two hundred parts of cold, and in twenty-two of boiling water, and in seven parts of alcohol. Professor Lépine, of Lyons, was the first to use this substance in medicine, and found it to be possessed of expectorant and diuretic properties when given in doses of three to nine grains. In the dose of fifteen grains he found it of value in neuralgia and hystero-epilepsy. Dr. G. Guelpa has, however, made a number of experiments with the drug (*Bulletin Général de Thérapeutique*, April 30, 1885), the results of which were at variance with those obtained by Lépine. He states that terpine exerts no action upon the respiratory tract, nor, in doses under fifteen or thirty grains, has it any effect upon the genito-urinary apparatus. It never caused albuminuria and hæmaturia, as Lépine had asserted, nor was there any appreciable action upon the nervous system. In the stomach it causes a sensation as of a foreign body and gives rise to dyspeptic symptoms. But while these experiments with terpine gave such negative results, a number of trials of another derivative of turpentine, terpinol, were more promising. Terpinol is an oily, colorless liquid, with an odor like that of hyacinths. When taken internally it is eliminated by the lungs, imparting a very strong and persistent odor of hyacinths to the breath, and occasioning a sensation of heat in the larynx and fauces. Dr. Guelpa administered it in doses of about six minims every four hours, in capsules, and found that it exerted a very favorable action in quieting the cough and modifying the secretion in bronchial catarrh. It was well borne even in large doses, the experimenter himself having taken over thirty-five minims in twelve hours without inconvenience. It exerted little or no action upon the genito-urinary tract.

Chloroform as an Hemostatic Agent.—Dr. Spaak recommends chloroform as a styptic in operations, especially about the mouth and throat. He uses it mixed with water in the proportion of one part to one hundred. A case is cited in which a sequestrum, the size of a large nut, was removed from the lower jaw with the loss of hardly a drop of blood. He employs the chloroformed water as a simple lotion or in the form of spray directed to the part, and he much prefers it to the ordinary styptics in common use.—*Journal de Médecine et de Chirurgie Pratiques*, April, 1885.

The Plaster-of-Paris Jacket.—The visit of Professor Sayre to Copenhagen last summer has had the effect of awakening anew, among the Continental surgeons, an interest in the method of treatment of Pott's disease of the spine by suspension and the plaster jacket. In a long paper continued through several numbers of the *Deutsche Medicinische Wochenschrift*, and recently published as a reprint, Dr. H. Nebel treats of the subject very thoroughly. He states that the method had fallen into discredit among German surgeons, and was but seldom employed until after the Congress at Copenhagen. And he attributes its revival in great measure to the exertions of Dr. Phelps, of New York State, who remained for a time in Germany and made a number of applications of the jacket. In Italy, also, the subject has received more attention of late, and in a recent number of the *Archivio di Ortopedia* is published a graduation thesis by Dr. Motta Mario upon "Kyphosis and its Orthopædic Treatment, especially by Sayre's Plaster Bandage." Dr. Mario was a student at the Ospedale Maggiore in Turin, and had the opportunity to observe a number of cases treated in this way. He was well pleased with the results in most of the cases, and hopes to see the method more generally adopted.

Intravenous Injections of Iodine in Infectious Diseases.—Dr. Van der Heyden recommends the treatment of infectious diseases by means of the intravenous injection of iodine. His formula is as follows: Iodine, one part; iodide of sodium, two parts; water, seven parts. The dose of this solution is two and a half drachms for each injection. In a case of typhoid fever an injection was followed by a rapid fall of the temperature, which did not again rise. In cholera he claimed to have obtained good results when the injections were practised early in the disease, but in the algid stage they were barren of results.—*Journal de Médecine de Paris*, May 3, 1885.

Treatment of Otorrhœa.—Dr. Bürkner recommends an ointment of one part of red precipitate to fifteen parts of vaseline in the treatment of furuncles and granulations in the external auditory canal. In the case of profuse and fetid suppuration of the middle ear he employs irrigation with a one per cent. solution of corrosive sublimate, and later an instillation of a one to five hundred solution of sublimate in alcohol. In a number of cases of chronic suppuration of the middle ear treated in this way, a cure was obtained in about one-half. The author insists upon the necessity of caution in the use of this substance in order to prevent its passage through the Eustachian tube into the pharynx.—*Journal de Médecine et de Chirurgie Pratiques*, April, 1885.

THE INFLUENCE OF INTESTINAL GASES UPON PERISTALSIS.—Professor Arpád Bóckai has been conducting a number of experiments to determine the influence of various gaseous substances upon the intestinal movements. He found that the introduction of hydrogen or nitrogen into the intestine had no effect, while that of oxygen arrested peristalsis previously excited by other means. Carbonic acid, marsh gas (CH_4), and sulphuretted hydrogen caused violent peristaltic movements. These three gases are present in fermentation and decomposition of the intestinal contents, and the author concludes that there is a causal relation between their presence and the diarrhœa which accompanies this condition. — *Deutsche Medicinal Zeitung*, April 30, 1885.

ISCHÆMIC MUSCULAR PARALYSIS AND CONTRACTURES.—After a limb has been tightly bandaged for a long time, it is not unusual to find paralysis or contractures of these muscles. This paralysis was stated by Volkmann some years ago to be purely muscular, and to be due to the deficiency in blood-supply caused by the pressure of the bandage. Volkmann's observations, however, passed almost unnoticed. Recently Dr. E. Leser has published a brochure embodying the results of a number of experiments undertaken with a view to test the truth of this theory. He employed rabbits chiefly, and either wrapped the limb in a firm roller or made temporary pressure with an elastic bandage. He found paralysis of the muscles even after the bandage had been on but a few hours. The reactions to the constant and induced currents were weakened or destroyed, although slight contractions could be obtained by applying the current to the nerve-trunks. Normal sensibility was retained. Usually on the following or the second day there was an attack of acute myositis, which gradually subsided, leaving no permanent changes except where movements of the limb were restricted by means of splints. He sees in this the cause of the persistence of the paralysis in men, and he advises strongly against rest and in favor of passive movements in the treatment of such cases. Examination of the affected muscles in two cases showed inflammation with the destruction of a certain number of the muscular fibres.—*Centralblatt für Klinische Medicin*, April 25, 1885.

REMOVAL OF A CALCULUS FROM THE VERMIFORM APPENDIX FOR THE RELIEF OF RECURRENT TYPHLITIS.—At a recent meeting of the Clinical Society of London (*Medical Press*, May 13, 1885), Dr. Symonds read the history of a case in which, at the suggestion of the late Dr. Mahomed, he had removed a calculus from the vermiform appendix for the relief of recurrent typhlitis. A basket-maker, aged twenty-three, was admitted to Guy's Hospital July 16, 1883. Six months previously he was seized during the night with pain in the right iliac region; this increased in severity and he became ill generally, and at the end of a week was unconscious, remaining in this state four days. The illness lasted seven weeks. During the first week he vomited everything, and his bowels were not opened for ten days. During the whole time there was great tenderness in the right iliac fossa. During the first part of his illness he was under the care of the parish, and for the last two weeks was in the Camberwell Infirmary, where he was told he had typhlitis. Soon after this, on getting about, he noticed a hard lump in the right groin about the size of a walnut; sometimes this swelling was painless, at other times it was very tender. Since this illness he has had repeated attacks of pain in the right iliac fossa, which come on suddenly, and last one or two days. The pain is relieved by poultices. At first these attacks recurred about once a month, but during the last five weeks he has had six attacks, and they have been increasing in severity. One of the attacks having been observed in the hospital, it was proposed that the cæcal region should be approached by an incision in the right iliac region. Dr. Mahomed was of the opinion that there existed an abscess cavity containing probably a calculus or concretion, and that the periodical occlusion of a communication with the cæcum determined the recurrence of pain. It was finally decided to cut down upon the small hard lump which was to be felt in the right groin on deep palpation. On August 24th chloroform was administered, and under the carbolic spray an incision was made, commencing two inches above and one inch internal to the anterior superior iliac spine, and curving downward and forward for about four inches, being much the same as that used in ligature of the external iliac, and so arranged that its centre corresponded with the position of the lump. The various structures were divided, but the transverse fascia was not distinctly recognized, owing possibly to the incision being rather near the iliac spine. The structures in front were now raised out of the iliac fossa, when the lump could be plainly felt from behind, and as yet the peritoneal cavity had not been opened. A hand pressed duly from the front steadied the swelling, and brought it more into the wound. A vertical incision was now made over the hard lump, and a small calculus exposed. Before removing it a fine silk suture was passed through the tissues just above, so that the orifice might not be lost. The opening was then enlarged, and the calculus removed. The soft and purple mucous membrane of the appendix was seen, and its tortuous course from the aperture could be traced upward toward the cæcum, so that there seemed no doubt of the canal having opened. Exploration of the cavity with a probe failed to detect a channel leading toward the cæcum. No pus or other fluid was found round the calculus, nor was there any fecal or unpleasant odor. The opening into the appendix was closed by Lembert's and the wound by deep silk sutures. The peritoneum was not opened, so far as could be determined, and this was attributed to the adhesions that had probably taken place at the time of the first attack, and to the method adopted in reaching the appendix. The usual gauze dressings were used. The calculus was oval in shape, smooth on the surface, and measured three-fourths of an inch long, and rather more than one-half of an inch wide. On section it showed a laminated calcareous capsule enclosing hardened fecal matter. The patient made a somewhat protracted but complete recovery, and in April, 1885, although an inmate of a lunatic asylum, it was learned that he had never had any bowel trouble since November, 1883. In his remarks on this case, Dr. Symonds points out that this is the first case in which a concretion or calculus has been removed from the appendix vermiformis without, at the same time, the opening of an abscess. He says also that the credit of the procedure must be given to Dr. Mahomed, at whose suggestion the operation was undertaken.

ŒDEMA OF THE NEW-BORN.—In a paper on this subject Dr. Letourneau asserts his belief that the condition is not one related to sclerema. The disease attacks usually premature infants or weakly twins. The little patients are drowsy, refuse to nurse, and cry incessantly. The extremities and face are blue, the pulse is weak or imperceptible. Respiration is scarcely audible, and there is often dulness over the lower portions of the lungs. The temperature is subnormal, falling in one case observed by the author as low as 67.5° F. before death. There is at the same time a rather hard and resisting œdema of the body and extremities. On post-mortem examination the tissues and organs are found filled with venous blood, and a greater or less part of the lungs, usually of the lower lobes, is hepatized. The author concludes that this condition is not an actual disease, but is rather a chronic asphyxia due to incomplete expansion of the lungs. The only treatment which he recommends is the artificial filling of the lungs with air.—*Allgemeine Medicinische Central-Zeitung*, April 25, 1885.

THE MEDICAL RECORD:

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THE INTERNATIONAL MEDICAL CONGRESS.

THE past week has brought no news calculated to reassure those who are anxious for the success of the International Medical Congress and the credit of American medicine. Nearly all the gentlemen appointed on the organization from Boston, Philadelphia, Baltimore, and Washington have withdrawn, while many prominent men in New York (aside from those forced off) and from the West will, we learn, either formally withdraw or informally decline to take any part in the work.

The comments of the medical press are almost uniformly condemnatory of the folly and short-sightedness of the American Medical Association. The *New York Medical Journal*, which was at first a little non-committal, not to say strabismic, in its views, has come out in a forcible denunciation of the American Association, and shows that it is a useless and mischief-making body. The *Louisville Medical News* edits the withdrawal announcements under the head "Destruction." The *Philadelphia Medical Times* suggests that there be a national gathering for the purpose of forming a new organization of the Congress.

The *Journal of the American Medical Association* leads off with a reference to the proverb that things done in haste may be repented of at leisure. The application is meant for Philadelphia, and the writer shows a *naïve* unconsciousness of its immense retro-active pertinence.

At present the best hopes for the future of the Congress lie in the fact that we have two years yet before its meeting. This is time enough for a good deal of hot feeling to subside and for concessions and compromises to be made. There has never yet been a Congress, we believe, without considerable heart-burning. Any hopes in the emollient effect of time, however, need not be cherished unless with them there is seen a prospect of some very radical changes in the personnel of the Executive Committee and the removal entirely of any medico-political issue from the organization and membership of the Congress. A meeting of the American Medical Association, entirely revoking its New Orleans work and restoring the old committee with its liberal policy, might, perhaps, save the Congress. We see at present no other way.

SEXUAL CRIMES AND THE LEISURE-CLASSES.

So far as we have been able to learn, the disclosures made in London by the *Pall Mall Gazette* relate largely to indulgences in sexual crime, and to distinct sexual perversions rather than to ordinary sexual immorality. And it would appear that the most common sexual perversion among British aristocrats is a desire for young and, as they are technically called, "fresh" girls who have reached the legal age of thirteen.

There is one conclusion regarding this matter which medical men are best able to make, and it is one which certainly is often practically brought to their attention. It is that while the sexual passions are most unrestrained among the young, they are most perverted and unrestrained also among those who lead idle and luxurious lives. There never can be a large and wealthy leisure-class without a considerable proportion indulging in great sexual excesses, often of the grossest character. With high living and nothing seriously to occupy the mind, the sexual organs are bound to occupy an excessively large part of the man's thoughts and feelings. The existence of a wealthy and, by virtue of social law, unemployed class, is always a source of social danger, as history shows. The comments of the public press indicate that the exposures of the *Gazette* will give an impulse toward the lessening of the social authority of the British leisure-class. If political economists would devise a way to set them all at work, the traffic in young girls would receive its most serious blow. As it is, we fear that but little of permanent benefit can come from the *Gazette's* revolting disclosures.

THE INTERNATIONAL SANITARY CONFERENCE.

THE International Sanitary Conference, whose sessions at Rome closed last month, is the fifth meeting of the kind that has so far been held. The first Conference was in Paris in 1851, the second in Constantinople in 1866, the third in Vienna in 1874, the fourth in Washington in 1881. None of these meetings has been attended with any very apparent practical results, and for this reason: The membership is composed of diplomatists and scientific men. The latter do all the work and the former go home and recommend that the work be not approved. Such at least has been the general working of the meetings. Commercial and political interests are as yet too strong to allow of the application of rigid sanitary rules to international commerce. One end perhaps has been in a measure gained, and that is the general adoption by sanitarians and by governments of the view that land quarantines and sanitary cordons are useless. And yet even now, if an epidemic breaks out, one or other of these measures is liable to be enforced.

The International Conference at Rome was composed of diplomatic and technical delegates from Germany, Belgium, Spain, France, Russia, Servia, Sweden and Norway, England, Switzerland, Denmark, Turkey, Greece, Austria, India, Italy, Japan, Mexico, Brazil, and several South American States. Among the prominent men of science present were Koch, Moleschott, Brouardel, Proust, Thorne, Fayrer, Semmola, and Sternberg. The discussions were confined to the subject of cholera. So far as we can learn the main results accomplished were the dogmatic reiteration of the opinion that "land quarantines and sanitary cordons are useless;" also the recommendation that ships which have no surgeon be officially inspected by a physician supplied by the consul of the

country to which the vessel is destined. Finally an excellent report was made on disinfectants, a report very similar to that made by the Committee of the American Public Health Association. The United States may credit itself, through its efficient delegate, Dr. Sternberg, with having been largely instrumental in accomplishing what little of practical work was done by the Fifth International Sanitary Conference.

CICATRIZATION IN BLOOD-VESSELS AFTER LIGATURE.

AN instructive paper, or rather monograph, was read by Dr. Senn, of Milwaukee, before the last session of the American Surgical Association on the subject of cicatrization in blood-vessels after ligature. A reprint of the paper is now before us. After giving the history of ligature as employed in surgery, and examining the older and most recent views regarding the histology of the blood-vessels, as well as the effects of permanent ligature, the author presents a detailed account of his own investigations and observations. He invariably performed his experiments with strict antiseptic precautions. Fifty-four ligatures were applied in a large number of healthy animals. In twenty-three cases double permanent ligation of arteries was performed, and, in nine, double temporary ligatures were applied. Similar experiments were also made on the veins. Among other things, the deleterious influence of suppuration on the healing process was well shown by the author's experimental inquiries. He found that "in all cases where the wound healed by primary union, the isolated portion of the vessel became adherent, as early as the second day, to the adjacent tissues, and, after a few days more, the interrupted vascular connections were restored."

When temporary ligatures were employed, suppuration, of course, was more frequently seen, on account of the unavoidable interference with reparative processes in the wound. In all cases where suppuration followed operative interference, the vitality of the intervening portion of the vessel suffered. Indeed, if sufficient time was given, this portion of the vessel was, as a rule, found to be completely separated and lying within the abscess cavity. Nevertheless, secondary hemorrhage was never seen as a result of suppuration, nor was sloughing of the intervening portion observed. The author explains this by the presence of a narrow intravascular cicatrix in both ends of the vessel, which "was usually supported by a strong paravascular ring of connective tissue, which formed a part of the thick wall of the abscess." Dr. Senn formulates the following conclusions as to the result of this part of his inquiries:

1. All surgical operations on blood-vessels should be performed under strict antiseptic precautions for the purpose of preventing suppuration.

2. In aseptic wounds the complete isolation of a vessel from its sheath for a distance of one inch is not followed by any serious disturbance of nutrition in the vessel-walls.

3. Suppuration invariably produces a loss of continuity of the vessel at the seat of ligature.

4. Inflammation beyond the limits of the reparative process interferes with the typical formation of the intravascular cicatrix.

Senn's experiments further led him to prefer catgut to silk, horse-hair, or silk-worm gut as suitable for aseptic ligatures. He demonstrated anew the circumstance that properly prepared catgut does not act as a foreign body, and although finally completely absorbed, resists long enough for the occurrence of vascular obliteration. He states that he has never observed a single case in hospital or private practice where the catgut ligature failed to fulfil its purpose of provisional hæmostasis. It never gave way before the definitive cicatrix had become sufficiently firm to resist intra-arterial pressure.

Dr. Senn is also in favor of freely opening the vascular sheath in order to fully expose the vessel to be ligated. He has never seen any harm result from this procedure. Is is to be borne in mind, however, that this teaching is opposed to that of a majority of surgeons, who hold that the vascular sheath should be spared as much as possible.

As regards the time required for permanent obliteration to become established, it was ascertained that it required from four to seven days in arteries, and from three to four days in veins.

There is no doubt that Dr. Senn has conscientiously labored to elucidate a subject, the importance of which requires no emphasis. If his conclusions are in some respects at variance with accepted doctrines, they will all the more stimulate further research. Meantime we may feel quite certain that the double aseptic catgut ligature should be more frequently made use of in our country than is at present done.

AN ENGLISHMAN'S PLEA FOR SPECIALISM.

DR. MORRELL MACKENZIE has recently written an article on "Specialism in Medicine" in the *Fortnightly Review*. Himself an admirable type of the new genus medicus, he has naturally used the occasion to put in the best light the justifications and advantages of the modern tendency to a subdivision of the medical art.

Dr. Mackenzie begins by describing, with a candor not entirely devoid of acridity, the feeling against specialists which has existed among English medical men. We infer from his description that this feeling has developed to a far greater extent across the water than here. It has amounted almost to a social ostracism of the class in question. Some of the medical corporations have, we are told, "endeavored to exclude specialists from positions of distinction within their own bodies." The latent feeling has revealed itself "in suggestive shrugs of the shoulders or elevation of the eyebrows at the mention of certain names; sometimes even in sly innuendo or in mild detraction, which is all the more effective because it is couched in a tone rather of sorrow than of anger. Again, there is the almost indecent eagerness with which any error or oversight on the part of a specialist is proclaimed, and the too obvious intent with which it is made the text of a discourse on the uselessness of specialists. At the dinner-table, at the medical societies, in the gossip that relieves the aridity of scientific discussion, at all places where doctors do most congregate, specialism and its professors were denounced with a wealth of epithet that the refined controversialists of Billingsgate might have envied."

Many of the medical journals catered to this feeling.

Its exponents have even, says our author, intimated that it was not "respectable," and Dr. Mackenzie shows in an amusing way how dearly the average middle-class John Bull hugs to himself this word. In the heart of the medical body corporate the desire to be "respectable" is intensified almost into a passion. Contrasting this condition of things with that in America, he makes the following observation:

"In America, where there is no 'leisured class' to look down upon those who labor, the medical faculty is recruited from the best families in the land, and its members accordingly act with an independence quite unknown in this country. Under these circumstances, specialism, instead of meeting with opposition, was received with open arms. I may say that when I was travelling in the United States three years ago nothing astonished me more than the universal diffusion of specialism. It would be almost impossible to find a city with ten thousand inhabitants in which there were not at least three or four specialists; while in one city, with a population of only one hundred and thirty thousand, I found thirteen specialists exclusively engaged in treating throat diseases.[!] Indeed the practical genius of the American people was never more clearly evinced than in the manner in which it embraced specialism."

Perhaps Dr. Mackenzie exaggerates a little the warmth of the American embrace. Specialism has been taken up enthusiastically by thousands of our young men. It has been received rather frigidly by the elders of the profession, but without any overt opposition. We recognize the necessity for it in our widely scattered population, where there are so many who cannot afford to travel a thousand miles to get the best technical skill.

Dr. Mackenzie calls attention to the fact that the opposition to specialism exists only in the medical profession. There is no obloquy attached to the lawyer who makes probate law, or patent law, or railroad law his specialty; in art, Verboeckhoven is respected though he paints only sheep; Landseer was not thought less of because he painted animals. So with the other arts and sciences, from engineering to philosophy.

But, after all, what is the use of trying to defend or attack specialism when everyone can see that it is an established fact, that it is demanded by the public and is imposed upon the doctor by the extent of medical science and the difficulties of mastering the technicalities of the medical art. No one can deny the utility of the microscope, stethoscope, laryngoscope, ophthalmoscope, and all the other innumerable instruments used in diagnosis and treatment. Yet no one can claim ever to be master of them all. There will come a time, no doubt, when the general consultant, the pure physician, will be eliminated from the face of the earth. Indeed the time is not far away already. The general consultants in this city are after all mainly consulted for their special knowledge of the heart and lungs or abdominal diseases. We are to have, by and by, says Dr. Mackenzie, only the general practitioner, who can never be displaced, and the specialist.

Whether this prospective state of things is to be the best thing for the profession is open to some discussion; but that it will be best for the public must be conceded, for the public demands it.

SELLING LOCATIONS.

As compared with England there is very little selling of practices or locations in this country. For one thing, it is probable that such transfers cannot be made so readily here. A physician's patients believe in him and have a measure of confidence in gentlemen whom he recommends, but they cannot be handed over without question. There is too much competition, and a new man, however recommended, has generally to fight the battle all over again.

It would contribute to the material interests of the doctor, however, if his practice were more of a merchantable article, for it would give him a surer feeling that he had acquired a certain available capital by long years of work. Judging from advertisements in our London medical exchanges, the value of a practice ranges in England all the way from $500 to $6,000.

A correspondent, Dr. G. W. Eddingfield, of Mace, Ind., has written us, urging the need of a more extensive bartering and sale of locations. Dr. Eddingfield argues, on business grounds, that the best thing for a doctor to do, when he finds that some man is crowding him out and drawing off his patients, is to dispose of his practice and seek his fortune elsewhere. We fear that this plan would hardly answer as a rule, for if a physician fails in one place he will probably not succeed in another. The selling of practices must be generally confined to those who find that they are tired of the harness or are in bad health, or infirm from age.

A WISE SOCIETY.

In the midst of the turmoil and strife over the petty issues of political and professional life, it is pleasant to see a medical society grapple firmly and courageously with a momentous question and carry it to a safe and glorious termination. This is what the Vermont State Medical Society did at its last semi-annual meeting in Bellows Falls. Aside from some brief moments devoted to dallying with such trifles as hygiene, purpura hemorrhagica, and antipyretics, the energies of the members were devoted to the elucidation of the following questions: "Shall the Society visit the paper-mill, the machine manufactory, and the brewery?" The first two points were settled immediately in the affirmative. But the question, Shall we visit the brewery? elicited a debate which, for sustained eloquence, logical force, and absence of personal feeling, will ever be memorable in the popular annual volume of Transactions.

The debate was begun by Dr. X, who proved in an easy manner the natural and inherent antagonism which exists between medical men and all forms of alcoholic liquors, and he argued that *a priori* it would be impossible for a doctor to enjoy himself in connection with a decomposing fluid containing at least five per cent. of alcohol. He therefore moved that the invitation be declined. Upon this, however, up rose Dr. Y, and showed that the assumption of the first gentleman was not well grounded. He also instanced, to the intense interest of the Society, the case of a doctor whom he had seen several years before and whom he had known to have drank several glasses of beer with apparent enjoyment.

Then began the storm of rhetorical, technical sesqui

pedalianism to which we have referred, and which, we are credibly informed, made the green hills of Vermont erect themselves several inches higher in pride. Amid this fermentation, the President, having moistened his lips with cold water, and thus preserved his presence of mind, moved to refer the whole matter to the Executive Committee; whereupon this was done and a recess was taken.

The Committee, after having taken copious draughts of milk, consulted the Code, and having found therein nothing bearing upon the subject, finally discovered that a local branch of the Woman's Christian Temperance Union opposed the visit and threatened to "boycott" the Society if it went to what they figuratively called the Sheol of Malted Sin. The ladies offered a compromise, however, viz., that each doctor should take a W. C. T. U. lady in his visit. The Committee made their report, and, having wisely or otherwise exhibited certain photographs of the temperance ladies, after another stormy discussion it was unanimously voted to accept the invitation, but to go alone.

The good ship of medical state thus safely weathered the breakers of disaster, and went through the brewery without touching a drop of its poisonous product, except sufficient to destroy the effects of a change of water.

THE MORBILITY AND MORTALITY OF MEASLES.

A NUMBER of statistical investigations which have been recently made appear to show that measles[1] is increasing in some parts of the world, while in many places it does not decline in the same ratio with other zymotic diseases. Thus in Paris the mortality from 1869 to 1874 was 3.03 per 10,000 inhabitants; from 1875 to 1879 it was 3.73; and in 1880, 1883, and 1884, it gradually rose to 8.55 per 10,000. In New York City the mortality from measles was, in 1874, 319 among 30,709 deaths; in 1883 the number was 716 to 34,011 deaths; and in 1884, 762 in 35,044 deaths.

Whether increasing or not, it is evident that measles is a source of mortality which is by no means insignificant. According to the last census the total number of deaths from measles in 1880, in this country, was 8,772 in a total mortality of 756,893. This makes the mortality at about the ratê of 1.7 per 10,000 inhabitants. In certain parts of France, including Paris and many large rural districts, the mortality is much higher than this, and in some of the smaller cities it has reached 24 per 10,000 (Sainte-Menehould), and even 40 per 10,000 (Epernay).

In the United States a curious disproportion exists between the South and North as regards the mortality from measles. In nearly every Northern and Western State the deaths from scarlatina are twice as numerous as those from measles, while in most Southern States the reverse is the case. Thus, in ten Southern States and one Territory the total annual mortality from measles was 2,113, that from scarlatina 1,838. This gives a ratio of 2.6 deaths per 10,000 inhabitants from the latter disease, while the ratio in New York State was 1.6 per 10,000.

There seems to be a greater proportional amount of fatal measles, therefore, in the South, and the disease in that section is more serious to life than scarlet fever. It is just possible that this excessive mortality is an accidental one, due to causes prevailing during the census year. Also that an indirect mortality from the sequelæ of measles occurs in the North sufficient to equalize the ratios. We regard such an explanation, however, as improbable.

It is known that there are certain countries where measles is always a serious disease. It does not appear to be the climate which produces this mortality, since it is in such regions as Finland and the Baltic coast, Brazil and the borders of the La Platte, that it is excessive.

It is generally stated that measles is more fatal in adults. However this may be, and we consider the fact not well proved, it is certain that, among infants and children, the mortality-rate is in inverse ratio to the age. In New York City the measles is most fatal in the second year of life, during which time one-third of all the deaths occur ("Annual Report New York City Board of Health," 1874, pp. 346, 347); next comes the first year of life, then the third and fourth. After the fourth year the mortality from measles is very small, while from the tenth to the seventieth year the total mortality amounts to only about three per cent. of the total. The statistics of Eloy, for Paris and Rheims (*L'Union Médicale*, 1885, p. 767), and those of Hecquet, for Abbeville ("Mém. de l'Acad. de Méd.," 1867, t. xxi., p. 529), show that the mortality also rapidly falls after the eighth year.

The records of the Health Office in this city, the statistics of Fox, and those of Eloy for Paris, show that a very large measles mortality occurs in the first year of life. In Paris it has even exceeded that for the second year.

The practical conclusions, from a study of measles mortality and morbility are that it is a disease which kills, if at all, in the first five years of life, before the school age, and that the efforts of preventive medicine should be directed toward keeping it from attacking this period of life. Elaborate regulations connected with schools are all very well, but they do not strike at the root of the matter. Not half a dozen school-children in New York City died of the measles in 1874.

SOME COMPARATIVE STATISTICS OF THE TREATMENT OF DIPHTHERIA.

CONTRIBUTIONS to the therapeutics of diphtheria are very numerous and for the most part very valueless. What the medical profession want just now is to know what measures will not help diphtheria rather than what will. Some such contribution as this has been made by Dr. N. Lunin, of St. Petersburg, who has presented (*St. Petersburg. Med. Wochensch.*, Nos. 6 u. 7, 1885) the results of a study of 296 cases of diphtheria treated in the Children's Hospital of the Princess of Oldenburg.

Dr. Lunin classifies his cases with reference to treatment into the fibrinous and the phlegmonous-septic forms. He also divides his cases into the naso-pharyngeal and the laryngeal and tracheal varieties. The first two classes, which included the larger number, were submitted

[1] The learned authors of Diseases of Children, Drs. Meigs and Pepper, write an excellent chapter on measles, in which they use the word as a plural. This use of the word is seen too frequently. Though based on dictionary authority, it is palpably incorrect. "Spots" may be a plural noun, but "the spots" is a noun in the singular number.

to treatment by corrosive sublimate, tincture of iron, chinolin, resorcin, bromine, and oil of turpentine.

Fifty-seven cases were treated with corrosive sublimate. The throat was pencilled every two hours with a one per cent. solution, and was washed with a solution of 1 to 5,000. Wine and musk were also given.

Ninety-four cases were treated with tincture of chloride of iron, of which from one to eight cubic centimetres were given daily—an insufficient amount no doubt in many cases. The throat was gargled every two hours with a solution of boracic acid and stimulants administered.

Chinolinum purum, recommended by O. Seifert, was tried in twenty-eight cases. The throat was frequently pencilled with a five per cent. solution and was gargled or irrigated with a 1 per 1,000 solution.

Resorcin was given in 27 cases, upon the recommendation of Andeer. The throat here was pencilled with a ten per cent. solution and irrigated with a one per cent. solution.

Bromine was used in 33 cases, according to the method recommended by Hiller. The bromine in one-fourth to one-half per cent. solution, with bromide of potassium, was pencilled on the throat every three or four hours, while the bromine in solution (.6 to 1.00 per 300) was inhaled from every half hour to every two hours.

Oil of turpentine was given in 23 cases, according to the methods of Bosse and Satlow. The oil was given internally in doses which were gradually increased up to ten drops hourly or two hundred and forty drops per day. This large amount caused no disturbance of the stomach. The throat was gargled with a boracic-acid solution, and wine and musk administered as in all the cases.

The results of these various treatments are best shown in the following table:

Method of Treatment.	Fibrinous form.			Phlegmonous septic form.			Total.		
	No. treated.	No. of deaths.	Per cent.	No. treated.	No. of deaths.	Per cent.	No. treated.	No. of deaths.	Per cent.
Sublimate.....	43	13	30.2	14	13	92.9	57	26	45.6
Iron.....	43	14	32.6	51	39	76.5	94	53	56.3
Chinolin.....	19	6	31.6	9	9	100.0	28	15	53.0
Resorcin.....	10	2	20.0	19	17	89.5	29	19	65.5
Bromine.....	15	7	46.7	18	16	88.9	33	23	69.7
Turpentine.....	12	1	8.3	11	9	81.8	32	10	43.4
Total.....	142	43	30.3	122	103	84.4	264	146	55.3

It will at once strike the reader that the results of treatment by any of the above methods are not very encouraging. Neither can we lay the blame on the constitution and condition of the child; for Dr. Lunin asserts that of 296 patients, only 25 were badly nourished, while 225 were well developed and well nourished.

According to the table we must infer that in the phlegmonous-septic form iron is the best remedy, as the mortality-rate under it was 76.5 per cent. On the other hand, in the fibrinous form oil of turpentine stands at the head. Bromine does not take a high rank in either form. Chinolin and resorcin were also disappointing.

THE QUESTION OF THE FAILURE OF MEDICAL CIVIL SERVICE REGULATIONS.

We took occasion just after the first civil service examination for medical positions under the city government to offer some mild criticisms as to the manner of conducting such a test, particularly with reference to the selection of the fittest man for office. In this editorial, while commending the scheme of medical civil service examination as admirable, we expressed the fear that such examinations might be so conducted as to enable merely "crammed" men to have an undue advantage over more practical men who had not recently enjoyed the advantage of that mental gorging known as a "cram quiz." We also offered some suggestions as to the future management of examinations, by while more practical tests might be applied. Finally, after expressing our hope and confidence that a perfectly fair system of selection would eventually be elaborated, we pointed out that the weak point of the present system was that the best men, according to the tests employed, were not necessarily chosen for office, but could be passed over to make place for men standing lower in the scale having political influence.

It seems the logic of events has confirmed these fears, and accordingly in our last issue we expressed ourselves as again disappointed with the present practical working of our municipal civil service system, inasmuch as the men standing the lowest in two medical examinations were appointed to office as quickly as those standing high on the list, while many of the latter, who were without political influence, have been completely ignored. In the first of these examinations, a man standing among the lowest in grade was one of the first to receive a position in the Health Department; and, as stated in our editorial of last week, in the second list, the man ranking first was passed over, while the man holding the seventy-sixth place was chosen, simply because he had a stronger political backing.

In view of these *facts*, it is with a mixture of surprise and amusement that we notice two editorials in the *Evening Post*, calling The Medical Record to task for some "loose writing" about the working of the municipal civil service rules. We would hasten to call the attention of our contemporary to the fact that when we stated in our first editorial that it was "possible for anyone standing quite low on the list, but having strong political influence, to obtain an office," we were *not* guilty of a "gross blunder," and we most excusably repeated the statement.

The *Post* states that the appointing officer is obliged by the rules to fill a vacancy from the first three names on the list, if any of the owners will take the place. We can fancy the smile that comes over the countenance of not a few who passed high in the late examinations, but who have not been anxiously pressed to take any place—in fact, have heard nothing more from the appointing powers, while the offices have been quickly filled by men taking a much lower percentage in the examinations. It is with some diffidence that we assure our learned, but mistaken contemporary that the best that can be said at present of our municipal civil service system is that it is purely negative, inasmuch as a man must pass some test before being considered eligible to office, but after that the lowest as well as the highest go into office usually in direct ratio to the influence employed.

Hospital Stewards.—A general order has been recently published limiting hereafter to the enlisted men of the army all appointments as hospital stewards.

News of the Week.

VIRGINIA STATE BOARD OF MEDICAL EXAMINERS.—Some practitioners in Virginia, says the *Virginia Medical Monthly*, are rebelling against the State law which requires that they shall first secure certificates from the State Board of Medical Examiners before undertaking practice in Virginia. One or two court clerks, indeed, have even refused to recognize the law. All such parties are forewarned "that they are violating the law, and that after a due amount of tolerance has been exhausted, they will be arrested and made to test the constitutionality of the Act of the General Assembly." Twenty-eight States and Territories now have State or Territorial Examining Boards, and it will not be long before all the other States will have like protections against impostors and incompetent pretenders.

PHILADELPHIA MEDICO-CHIRURGICAL COLLEGE.—Dr. Le Sieur Weir has resigned the Chair of Dermatology.

THE NEW YORK POST-GRADUATE SCHOOL AND HOSPITAL has received a donation of $1,000 for a children's ward, and $1,000 for the general hospital fund.

ST. LUKE'S HOSPITAL has recently received a bequest of $7,000.

THE MISSOURI STATE BOARD OF HEALTH held a stated meeting in St. Louis, on July 3d, perfected its organization, and transacted official business. The Board consists of three physicians, one eclectic, one homœopath, and two farmers and stockmen. Although the Legislature at the last session failed to provide for the continued financial support of this body, the Governor and other State officials say they are earnestly desirous of its continuance, and have pledged themselves to use their influence with the next Assembly to provide for the deficiencies created by the failure of appropriation by the last one.

PROFESSOR LEUBE, of Erlangen, succeeds Gerhardt in the Chair of Medicine at Wurzburg.

PROFESSOR BILLROTH has received from the King of Portugal a very much prized and rarely bestowed decoration, viz., the gold collar and star of the Order of St. Jacob. This is bestowed for surgical services rendered at his Majesty's court.

AN ÆSTHETIC SURGEON.—Mr. Lawson Tait will not have homely women as nurses.

FURTHER WITHDRAWALS FROM THE ORGANIZATION OF THE INTERNATIONAL MEDICAL CONGRESS.—All the members of the organization of the International Medical Congress, appointed from Boston, twenty in number, have, as we intimated in our last issue, withdrawn. The Baltimore members, twelve in number, have also withdrawn. The same action has been taken by the Washington members. We hear also of resignations coming in from St. Louis and other Western cities.

THE FATE OF SUCCESSFUL PATENT MEDICINE MEN is not always happy. Ayre and Helmbold became insane, and now we hear that Perry Davis, of "Pain-Killer" fame, is a lunatic in a Philadelphia almshouse.

FIGHTING THE PATENT MEDICINE TRADE.—A mixed commission of twenty-four persons, made up of physicians and pharmacists, has been constituted at Berlin, with the object of taking steps to prevent the further extension of the patent medicine trade in that city. At the first meeting a resolution was moved to petition the chief board of police in Berlin (Konigliches Polizei Præsiduum) to follow the example set by corresponding boards in Frankfort-on-the-Main and Carlsruhe, in publishing from time to time in the daily papers popular instructive articles on the subject of patent medicines.

M. FERRÁN'S OPINION OF CHRIST AND PASTEUR.—M. Ferran's intellectual balance is pretty well shown by the following, which is credited to him by the *Journal de Médecine*: "The two greatest men that humanity has possessed are Christ, who has given us moral redemption, and Pasteur, who has given us the laws which can lead us to our physical redemption."

THE DEATH OF DR. RUFUS H. GILBERT, of this city, occurred last week. Dr. Gilbert achieved fame as an engineer and railroad man rather than as a physician. He was the originator of the elevated railroad system of this city, and for a long time the Sixth Avenue Road went by his name. Dr. Gilbert was born about fifty-five years ago in Guilford, Chenango County, this State. He studied medicine with Dr. Willard Parker in this city, and was graduated from the College of Physicians and Surgeons. He returned to Corning and built up a large practice there. At the breaking out of the war he joined the Duryee Zouaves as a surgeon, and went through the rebellion, performing at the battle of Big Bethel the first surgical operation under fire made during the war. He rose in the service, and was finally made Medical Director and Superintendent of the United States Army Hospitals, having under him many of the most distinguished surgeons in the service. Upon the close of the war his health prevented his pursuing his profession, and he entered the railroad business.

THE WIFE OF DR. FRANK H. HAMILTON, who died on the 4th inst., was of such an unobtrusive disposition that few, even of her most intimate associates, have ever known to what an extent she has aided her husband in his literary and scientific labors. Without special technical training, she yet kept herself familiar not only with her husband's famous cases, but with the literature of the profession, and was his constant adviser and confidant in the preparation of his volumes, as well as his most valuable aid in the work of proof-reading and revising. Not a page of any one of the seven revised editions of his work on "Fractures and Dislocations" (a book of one thousand octavo pages), but had the benefit of her suggestions in the manuscript and her trained eye in the correction of technical, as well as typographical errors; and the same may be said of his "Treatise on Surgery," and "Military Surgery and Hygiene."

DISINFECTION OF RAGS.—We learn that the Committee on Disinfectants of the International Sanitary Conference unanimously recommended that rags should not be treated as ordinary merchandise, and that as a matter of prudence, and in consideration of the great interest at stake, disinfection of rags was to be recommended.

CONSULTING WITH HOMŒOPATHS.—The wife of Mr. Bayard, Secretary of State, has been lying ill at Wilmington, Del., under the care of a homœopathic physician, Dr. Negendank. The daily papers assert that regular physicians, among them Dr. Gardner (Garnett?), of Washington, have been in consultation with the physician in attendance.

THE CHOLERA.—There does not seem to be any material difference in the progress of cholera in Spain. It is slowly extending, and, if we may credit reports, it is attacking over a thousand persons daily. The number of victims has, therefore, already far exceeded thirty thousand. The reports about Ferrán's inoculations continue to be indefinite; but, on the whole, confidence in his methods is waning. Cholera is said to have reappeared in the South of France, but information on this point is hard to get.

MEN AS TRAINED NURSES.—An association has been formed in London for the purpose of training men as nurses. The promoters believe that many men would rather be attended in illness by their own sex than by women. Bachelors, and widowers residing in chambers, and some men in families would, it is thought, employ properly trained men.

AN HONOR TO DR. BROWN-SÉQUARD.—The great biennial prize of twenty thousand francs has been awarded by the Academy of Sciences to Professor Brown-Séquard. His principal competitor was the celebrated African traveller, M. Savorgnan de Brazza. The biennial prize is awarded in turn by each of the five Academies which form the Institute; it is, therefore, in reality a decennial prize so far as each Academy is concerned. While the reward, which thus crowns the life and labors of a most eminent man, is hailed with universal applause, it is a matter of regret, says the *Medical Times and Gazette*, that Professor Brown-Séquard should not be a member of the Academy of Sciences or of the Academy of Medicine. In other countries these scientific distinctions would have been conferred upon him long ago by acclamation. In France the system of "close boroughs," which prevails throughout the scientific organizations, seems to result in the exclusion of many an eminent man, who has excited the jealousy or dissatisfaction of certain members of the scientific aristocracy. Many a man of second-rate capacities enters the hallowed precincts, because his very moderate capacities have never given offence, while candidates of the highest rank are neglected.

HOW TO REMOVE A PLASTER BANDAGE.—Dr. G. Krosz writes that the removal of a plaster-of-Paris dressing is greatly facilitated by first scraping a groove with a knife, and then dropping along it a solution of caustic soda. In a few minutes the plaster becomes pulpy along this line, and the bandage can then easily be cut through. If two lateral grooves be made, instead of one, a lid can be cut out of the bandage, the leg can be lifted up for the necessary inspection and returned, the lid being reapplied and retained with a roller bandage. In this way the plaster dressing is not cracked, and the limb is not jolted in the efforts to remove the bandage. By this method, also, it is a very easy matter to cut any fenestra that may be needed.—*Deutsche Medicinal-Zeitung.*

Reviews and Notices.

A TREATISE ON PRACTICAL CHEMISTRY AND QUALITATIVE ORGANIC ANALYSIS. By FRANK CLOWES, D.Sc., London, Professor of Chemistry at the University College, Nottingham, etc. 12mo, pp. 376. Philadelphia: Lea Brothers & Co. 1885.

THIS work is especially adapted for use in the laboratories of schools and colleges, and the present volume is the third American from the fourth English edition. The author is to be congratulated on the valuable treatise he has prepared. The style is clear, the language terse and vigorous. Beginning with a list of apparatus necessary for chemical work, he gradually unfolds the subject from its simpler to its more complex divisions. The analytical methods, he states, have been thoroughly proved by himself and by his students. It is the most readable book of its kind we have yet seen. There is a certain fascination about it which must certainly communicate its spirit to the labors of the student. It is, without doubt, "a systematic, intelligible, and fully equipped laboratory guide and text-book."

THE TEN LAWS OF HEALTH; OR, HOW DISEASES ARE PRODUCED AND PREVENTED. By J. R. BLACK, M.D. 12mo, pp. 413. Philadelphia: J. B. Lippincott & Co. 1885.

WE cannot too highly commend this household guide to right living, with all its attendant blessings. It might well be styled The Modern Decalogue, so pregnant are its suggestions with good to physical humanity. The ten laws here presented are in turn those relating to pure air, proper food and drink, exercise, suitable clothing, sexual hygiene, climate, occupation, personal cleanliness, rest and sleep with proper mental tranquillity, and intermarriage of near blood-relations. These topics are discussed in order, in relation to their full bearing on the health of the family and the preservation of the home from the inroads of disease. The penalties for violating these laws are forcibly dwelt upon, not in the words of a mere alarmist, but from the standpoint of one whose facts are drawn from personal experience, and who most thoroughly believes in "preventive medicine."

Part II. discusses the germ theory of disease and is put into popular language. The key-note of its teachings lies in these words: "The *only time* and the *only place* for effectually stamping out a pestilential infection in any city, town, or hamlet, is at the *bedside of the very first cases* of the disease." Surely no doctrine could be sounder. The methods of contagion from the common infectious diseases—diphtheria, scarlatina, typhoid, etc.—are plainly given and followed by minute directions for disinfection. That the book has found a place in the minds of the public is attested by the fact that the present is the third edition.

ON SOME COMMON INJURIES TO LIMBS: THEIR TREATMENT AND AFTER-TREATMENT, INCLUDING BONE-SETTING (SO-CALLED). By EDWARD COTTERELL, M.R.C.S., Eng., L.R.C.P., Lond., late House Surgeon University College Hospital; Atkinson Morley Surgical Scholar, University College, London, etc. With illustrations. Imp. 16mo, pp. 108. London: H. K. Lewis. 1885.

THE aim of the little work is to call attention to the necessity of paying due attention to slight surgical affections, especially sprains and injuries to the joints. The importance of rightly managing these surgical "slight ailments" can hardly be over-estimated. It is success or failure in these cases that makes or mars the young practitioner, and the knowledge imparted in this handy little volume is precisely that which may save him from disaster on the threshhold of his career. Even older surgeons will find the hour spent in reading these pages by no means wasted.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, May 13, 1885.

JOHN A. WYETH, M.D., PRESIDENT, IN THE CHAIR.

DR. E. G. JANEWAY presented, in behalf of a candidate, a specimen of *dissecting aneurism of the aorta.*

DR. A. G. GERSTER presented four specimens of

ADENOID CANCER OF THE RECTUM,

all removed by operation. Clinically and pathologically surgeons distinguished between epithelioma and adenoid carcinoma of the rectal mucous membrane. The former was less malignant, of slow growth, and of not a very marked tendency to local and systemic dissemination. It rarely penetrated the perirectal tissues, hence a complete removal was more easily accomplished than in cases of succulent adenoid carcinoma. These have a pronounced tendency to rapid growth, with infiltration, early ulceration, and frequent hemorrhages.

It is to be regretted that a great proportion of these formidable growths remain undetected until their extent precludes a safe and complete removal.

As to their causation, it is of some interest to note that all of the four patients had been suffering from hemorrhoids for many years and were accustomed to the regular use of enemata. The seat of the disease in these four cases was the left side of the rectum; that is a place where the point of the syringe, introduced by the right hand, would naturally and did impinge upon the mucous membrane. Aside from these, Dr. Gerster had taken pains in other cases of rectal trouble to ascertain similar data, and had found that the habitual use of enemata is a very probable source of many forms of rectal disease.

As regards the therapy, doubts as to the propriety of the exsection of the rectum still prevail. But in cases where the possibility of a complete removal offers fair chances, the indication to remove the deadly growth stands paramount. Among palliative measures scraping out of the cancerous masses deserves the first place. If the growth be somewhat distant from the anal margin, a posterior incision through all the soft tissues will prepare a way to the growth, and will afford natural means of drainage.

Colotomy is a very extreme measure of doubtful value, and should be reserved for the most hopeless cases, that are bedridden, or where the tumor is entirely inaccessible. The patient's condition after colotomy is truly pitiable, and it is not a wonder that most of them rather choose the more dangerous operation of exsection.

With the improved technique of operative procedures, this operation also has become safer. The principle of securing each and every mass of tissue by double ligature, and dividing between these, will diminish hemorrhage, the most formidable danger in exsection of the rectum, to a minimum of a few ounces. By occluding the distal end of the gut by clamp or ligature, the escape of rectal contents and injection of the wound will be guarded against during the course of the operation. The first part of the dissection, until the pelvic fascia is exposed and severed, is not laborious, especially in male subjects or in women with a narrow pelvis. After the division of the fascia the organ readily yields to traction and can be well exposed, but the possibility of opening the peritoneum is imminent, or frequently unavoidable. Yet, if injection from without can be excluded, this would nowise increase the dangers. The chief danger is injection from without, and all endeavors have to be concentrated on escaping it. One of the four patients lost his life through retroperitoneal phlegmon due to a fault in the technique employed, which well deserves some mention. If after ablation of the gut the stump is left too short—that is, for fear of injuring the peritoneum, not enough of the intestine is dissected out—the stitches fixing it to the cutaneous margin will prematurely cut through, and will permit its retraction into the bottom of the cavity. And as it is a well-known fact that even the most careful preparative treatment does not always succeed in clearing the thick gut of elderly patients of all fæces, it will happen that intestinal contents will escape through the retracted stump, will soil the fresh wound, causing a septic form of suppuration, which will rapidly extend up the front of the sacrum. If an infection take place during the first three or four days after the operation, especially when the peritoneal cavity had been invaded, the patient will generally succumb.

CASE I.—E. T——, porter, aged twenty-seven, had rectal trouble since his eighth year; general condition good. Adeno-carcinoma of left and posterior side of rectum, situated about one inch and a half above sphincter ani. Tip of index-finger can just touch healthy mucous membrane above the tumor. Exsection of rectum at Mount Sinai Hospital, November 18, 1885, preceding exsection of coccyx under ether. Peritoneum exposed, not injured. Long intestinal stump attached to skin by four stitches. Large wound packed loosely with iodoformed gauze. During operation frequent irrigation of the wound with corrosive sublimate one to five thousand. Loss of blood very small. No shock, although the operation lasted two and a half hours. Exsected piece of gut five inches long, the elliptic growth two by three inches in diameter. Temperatures slightly elevated; general condition good under small doses of morphine up to November 21st, when temperature rose to 103° F., but in a few weeks fell to the normal figure. This elevation was due to indigestion. Bowels moved by castor-oil on November 24th. From this date on daily sitz-bath and uninterrupted cure.

In this case the sphincter ani had been preserved, and to restore its function a plastic operation was performed February 28, 1884. The patient was presented at the New York Polyclinic May 12th, exhibiting good retentive power.

CASE II.—H. M——, tailor, aged fifty-three; small thickset man. Adeno-cancer of rectum, occupying almost its entire circumference, with its centre on the left side, ulcerated, firmly attached to prostate. Its upper edge can be barely reached by the tip of the index-finger. General condition good.

Operation under ether January 14, 1885, at Mount Sinai Hospital. Very difficult and tedious dissection on account of the narrow and deep pelvis, and the close adhesion to the prostate. A rather short stump was stitched to the skin. Dressed as Case I. Length of gut removed five and a half inches. Up to January 19th everything went well; then fever set in, and the dressings being removed it was found that the stitches had cut through, the stump was retracted, and the wound extensively soiled by fæces. Thorough disinfection could not be attained, and patient died of septicæmia January 23d. Post-mortem examination revealed a number of retroperitoneal abscesses. In one corner of the wound a brittle fragment of sponge was found imbedded in the granulations.

CASE III.—Mrs. E. H——, aged fifty-three, flabby, fat woman, with large frame and a poor circulation. Semi-spherical soft adeno-carcinoma occupying posterior and left side of rectum. Healthy mucous membrane beyond the tumor easily palpable. Exsection of coccyx and removal of four inches of gut, together with the sphincter, on February 6, 1885, at the German Hospital. Easy operation, slight hemorrhage. February 11th, temperature rises to 102° F. Dressings were removed, and a portion of the wound was found coated. Diarrhœa attributed to the use of corrosive sublimate had set in, wherefor hourly irrigations with vin. camphoratum were ordered, together with opium internally. By February 16th her appetite had become quite keen; the wound was clean and granulating. By February 21st it had much diminished in size. March 5th set in with dyspnœa,

cough, and slight icterus, with somnolency. Next day the temperature rose to 103° F., and rusty sputa appeared. Repeated careful examination of the wound, and especially of the retroperitoneal region, by inserting a long aspirating needle revealed no local disturbance. Patient died March 14th. Autopsy confirmed the diagnosis of hypostatic pneumonia. Abdominal organs were found normal. Long-continued recumbent posture of the flabby patient, with a weak heart's action, was the cause of the fatal pneumonia.

CASE IV.—C. F——, drayman, aged sixty-eight. Extensive ulcerated adeno-carcinoma of terminal three inches of rectum, a portion of it on the left side projecting externally in the shape of a sessile tumor. Koprostasis, pain, and hemorrhages have undermined the patient's health to such an extent that an exsection is out of the question. On May 7th, ether being administered, such portions of the growth as would yield to a sharp spoon were thoroughly curetted out, and the external growth was removed at the same time. To prevent secondary hemorrhage and yet to permit the escape of gases a tampon canula was inserted into the lower portion of the gut. It consisted of a short piece of stout rubber gas tubing, wound about with iodoformed gauze. No reaction followed, and the patient felt quite comfortable, especially after a thorough evacuation of the thick gut had been attained by administering a purge. The tampon tube will cause tenesmus, unless the sphincter ani was first put out of action by the disease or by section or stretching.

The PRESIDENT said that the text-books spoke of the disease as occurring more frequently in women than in men, but according to his experience it occurred most frequently among males.

DR. GERSTER said he had observed twenty-one cases, and in those the sexes were nearly equally divided.

DR. BOLDT referred to the use of peptonized-milk for two or three weeks prior to operations similar to those performed by Dr. Gerster, and for the purpose of avoiding the formation of scybalous masses.

DR. GERSTER said the method adopted in his cases was for a week or ten days to restrict the patient to a strictly liquid diet, to administer once or twice an active purgative, and at the same time give twice a day a large injection; but despite this method, in the cases reported, large masses of fecal matter came away in a comparatively short time after the operation.

DR. L. H. SAYRE presented a specimen with the following history:

POTT'S DISEASE: SPONDYLITIS COMPLICATED WITH MYELITIS.

February 10, 1882, M. L. E——, thirty-one years of age, was brought to me by Dr. Janeway, for the purpose of applying a plaster jacket.

History.—On February 27, 1881, while driving in a very dark night, he was thrown from his wagon over the dash-board, turning almost a complete somersault and wrenching his back very badly. He was exposed in a cold rain for nearly five hours before he reached home, having to drive six miles; was in his wet clothes for some time after arriving home. Commenced complaining of severe pain in his back from that time; applied various liniments and plasters for three months without any benefit. Then consulted Dr. C. F. Gaylor, who advised him to take exercise. This increased his pain to such a degree that he was compelled to keep quiet, resting most of the time on a sofa or lying down on the bed. He then applied to Dr. Janeway, who applied hot irons to his back in five places. After some weeks, Dr. Janeway observed a slight knuckle or projection in his spine, and advised him to come to me.

Present condition.—Has numbness in both feet; right one the worst, feeling as if it was asleep; cannot walk down stairs or step over the gutter without assistance; cannot stoop to pick anything from the floor without squatting; the least movement of the spine hurts him; jarring on his heels hurts him very badly; pressure on his head or shoulders greatly aggravates his pain. Partial suspension by the armpits and head gives him great relief. There is very slight prominence of the eleventh and twelfth dorsal spines, which become less prominent when suspended, and, when he became properly suspended, the pain was entirely relieved.

Diagnosis.—Spondylitis of the eleventh and twelfth dorsal vertebræ and probably the first lumbar, with myelitis.

Treatment.—Rest in the horizontal posture, with ice to the spine; cups, first dry and then wet; afterward, suspension and the application of a plaster-of-Paris jacket.

On March 9, 1882, a plaster jacket was applied without the jury-mast; but this failed to entirely relieve the pain, and on March 18th the jury-mast was added, which gave him perfect relief from pain.

On April 10th the jury-mast was removed, as he said it was so conspicuous; a modification of the jury-mast was then applied.

On May 28th a new jacket was applied, the same head-support being adjusted, although he admitted it was not so effective as the original jury-mast; and in the following August it was taken out entirely, as it did him no good. Two months later a new jacket was applied and the jury-mast left out entirely.

One month after this, however, he requested that a new jacket be applied with the original jury-mast as in the first, as the modified jury-mast caused him great pain whenever he was subjected to any jar. This was not the case with the jury-mast; he was then perfectly free from all pain.

By November 11, 1883, he was so much improved that the plaster jacket was applied as a corset without the jury-mast, although he at that time was unable to move his legs naturally; with the new jacket on, however, he was free from pain in the spine. This jacket was applied at his own house in South Yonkers.

On April 22, 1884, he was able to come to the office and have a new corset applied; but he looked badly, and stated that he had been examined for some throat troubles, and I was afterward informed he had tubercular laryngitis, and from another source I heard he had malignant disease of the throat. A sister of his had died previously of tubercular laryngitis.

During this time he had been able to come down and attend partially to business in New York as long as his jacket remained good.

He had sued the city for damages, carrying it from one court to another and attending the trials, and had been greatly bothered by his creditors; so that this mental anxiety and worry, combined with the disease of the spine and throat difficulty, tended to run down the man, whose strength was already almost overtaxed by his bodily ailments.

During this trial several of our eminent men testified for the defence their belief that the disease was not that of spondylitis or true disease of the vertebræ, but rather that the cord alone was affected. My father, Dr. L. A. Sayre, appeared on the witness stand and endeavored to demonstrate to the Court the effects of the plaster jacket and jury-mast in this case, and in all diseases of the spine, and the painful effects of its removal while disease of the spine was so existing.

The result of the trial finally was a verdict for the plaintiff.

In March, 1885, the wife of the patient came to me and requested me to put a new jacket on the man at the house, as he was unable to come down. I had only seen him once or twice during the past year, and thought he was doing well or I should have heard from him. Being unable to take charge of the case at his own house, I referred him to Dr. Robert Taylor, who had frequently attended him with me. This she accordingly did, and I

heard nothing more until a few weeks ago, when I heard he was very ill indeed, but was under the care of Dr. Moffatt, of Yonkers, from whom I secured the following information.

For some two weeks prior to his death he had complained very much of his back and legs, gradually becoming weaker, with sharp pains in the head, passing from the base of the brain up to the forehead. Two days before his death paralysis of the right side occurred, extending from the toes to the head, the facial muscles being also involved; a slight improvement occurred in this respect during the following twenty-four hours; he then passed into a comatose condition, remaining so up to a short time before death, when he seemed to regain consciousness for a few moments, and his wife states moved the arm and leg of the previously paralyzed side. He, however, again relapsed into unconsciousness, in which condition he remained until death.

During this last sickness the patient was under the care of Dr. H. Moffatt, of Yonkers, who diagnosticated the case as one of tubercular meningitis, and treated him accordingly.

Autopsy on Martin L. E——, by Drs. E. Develin, H. Moffatt, and Biggs, May 6, 1885, thirty-eight hours after death. Rigor mortis well marked; body emaciated. Enlargement and partial consolidation of spinous processes of twelfth dorsal, first, second, and third lumbar vertebræ. Spinal canal opened and cord removed. In the body of the second lumbar vertebræ was an abscess cavity of the size of a large hickory nut; the intervertebral disk between the first and second lumbar vertebræ was absorbed, and the cavity of the latter communicated with that in the body of the vertebræ. The cartilage between the third and fourth lumbar vertebræ is also absorbed. From this cavity and the abscess cavity of the second lumbar vertebræ communications existed into a large psoas abscess which passed down to a point just below Poupart's ligament on the right side, but had not pointed externally; this contained about a pint of fairly healthy-looking pus with clots of broken down tissue. There was also an opening from the fourth and fifth lumbar vertebræ where the cartilage was absorbed, extending into the spinal canal itself, from which pus was seen flowing. The cord was removed for microscopical examination. Brain: Tubercles were found along the fissure of Sylvius, crura, and medulla; no effusion into the ventricles; very distinct evidences of basilar tubercular meningitis. Heart: Normal; death occurring in strong systole. Lungs: Adhesions at both apices, and abundant deposit of tubercle in both lungs; old inflammation at right apex. Kidneys: Small; capsule not adherent; tubercles also found, but not excessive; also evidence of catarrhal inflammation. Larynx: Marked thickening and induration of epiglottis, aryteno-epiglottidean folds and cartilages; tuberculous ulceration at base of fold on left side. Testicles: Enlarged and presenting evidence of tubercular infiltration.

The specimen secured consists of the first, second, third, and fourth lumbar vertebræ, the spine being sawn in two with the spinous processes to the right. The corresponding half the family would not allow to be taken.

Dr. Janeway said the specimen had interested him a good deal, because he saw the patient early after the receipt of the injury and gave him a very careful examination. At first the question arose whether the symptoms were due to the irritation accompanying spinal meningitis, or to disease of the cord, or to disease of the vertebræ. At the patient's third visit Dr. Janeway found the phenomena of spinal caries so well marked, that is, pain on pressure on the top of the head, rigidity of the muscles of the leg, etc., that he recommended fixation of the spine, and sent the patient to Dr. Sayre. The point of interest in the case was the diversity of opinion concerning the nature of the affection which obtained at the trial, and the fact that three neurologists and surgeons had absolutely denied that there was any organic disease of the spine.

The President referred to a case which came under his observation, that of a man who was caught under an elevator and received a fracture of one or two vertebræ. In that case there were symptoms of myelitis, paralysis of the muscles of the leg, bladder, and rectum, which lasted for a long time. It was now nearly two years since the occurrence of the accident, and the patient was almost completely recovered, after having been treated by mechanical appliance, giving support from the hips and under the axilla, and extension made by screw and ratchet.

EXPERIMENTAL RESEARCH IN ETHER NARCOSIS.

Dr. R. W. Amidon presented the viscera of a cat which had died in a condition of narcosis from inhalation of ether. Five hours after the animal's death the right auricle contracted under the influence of mechanical irritation, as was demonstrated to the Society by quickly snapping the right side of the heart with the end of the finger. According to Dr. Amidon's observations ether kills a cat in about ten minutes, with shallow respiration and a continuation of the cardiac pulsation one or two minutes after respirations have ceased. The heart ceases to beat in diastole on the right side and in systole on the left side. The abdominal viscera are very much congested, especially the liver. The kidneys are almost of stony hardness, especially in the pyramidal portion. The spleen is congested. The lungs are usually normal; they are neither excessively congested nor œdematous. The abdominal, thoracic, and cervical veins are excessively distended with blood. The brain and spinal cord are apparently normal.

Dr. Amidon remarked that his experiments were made for the following purpose: It had been laid down in many text-books in surgery that ether-death was not always caused by asphyxia, but by heart-failure. In no case which he had studied had heart-failure been a primary factor. The anatomical appearances had been those of asphyxia, and he submitted the results of his experiments to the Society.

The indication in ether narcosis was, according to the result of his experiments, to start respiration and unload the right side of the heart, and the best method of accomplishing this was by artificial respiration accompanied by the administration of atropine, as he had set forth in a recently published paper.

Dr. Janeway remarked that he had heretofore directed attention to the indication for drawing off blood from the right heart with the hypodermic needle in certain cases, and in a few instances he had resorted to that procedure, but he had not yet been prepared to publish the result of his observations. He supposed it quite probable that in the great majority of cases of death from ether the fatal result was due to aspiration of food into the larynx and trachea.

The President referred to a case in which the woman was practically dead for fifteen minutes, and in which the suspension of animation was produced by a blood-clot in the larynx.

Dr. Gerster referred to one case in which death was caused immediately by the ether. It was that of a woman thirty-five years of age, with a large and simple hypertrophy of the thyroid body which pressed upon the trachea, causing dyspnœa by stenosis, and she also suffered from chronic catarrhal pneumonia of both sides, which greatly increased the dyspnœa. He decided, in spite of the large goitre, to perform tracheotomy to relieve the dyspnœa. The patient was anæsthetized with ether, and did not receive more than four or five whiffs before she became unconscious. The pulse and respiration going on, the incision was made with the knife and thermal cautery, but during the operation the pulse and respiration ceased and the face of the patient presented the appearance of one in collapse. Tracheotomy was

rapidly completed, and one or two shallow respirations took place, but the patient was dead. At the autopsy there was found extensive involvement of both lungs, and fatty heart with insufficiency of the tricuspid valves.

DR. AMIDON remarked with reference to aspiration of the right side of the heart, that he had seen animals apparently dead from ether narcosis, and the heart had begun to beat again after free incision in a large vein or in the liver, and allow it to be partially evacuated. He had suggested in his paper that free venesection might be a powerful adjuvant in the treatment of these cases. He would ask the surgeons present if they had noticed any difference in the effect produced by ether when Esmarch's bandage had been used; that is, whether the patient came under its influence more or less rapidly, and whether there was more or less liability to accidents.

DR. GERSTER said he had not observed any case with special reference to these points. With reference, however, to the propriety of artificial respiration, which he indorsed thoroughly, he might relate a case in which the heart had ceased entirely to beat, as the result of entrance of air into the pleural cavity. The case was one in which the pleural cavity was opened by an operation for the removal of a morbid growth, and as soon as the lung was subjected to the influence of atmospheric air the heart's action and respiration ceased, but were immediately restored by closure of the opening.

The Society then went into executive session.

Correspondence.

OUR LONDON LETTER.

(From our Special Correspondent.)

MR. LUND'S LECTURES AT THE COLLEGE OF SURGEONS —CASES OF RETENTION OF URINE—DR. MATHEWS DUNCAN ON RETENTION OF FÆCES—PUNCTURE OF THE BLADDER—VESICAL CALCULI—THE INTERNATIONAL SANITARY CONFERENCE AND QUARANTINE—THE DUST-BIN NUISANCE—THE NEW NOMENCLATURE OF DISEASES, AND SOME OF THE CHANGES FOUND IN IT.

LONDON, June 23, 1885.

MR. LUND, Professor of Surgery in the Victoria University, is nothing if not practical, and has set a useful precedent in his lectures just delivered at the College of Surgeons. Doubtless many of those who attend the College lectures have become tired of long set orations. Mr. Lund has adopted a different method, and, instead of confining himself to one subject, has given a number of interesting and practical remarks on various surgical subjects.

In his second lecture he spoke of some genito-urinary troubles. Referring to a topic which cannot be too often brought before practitioners, viz., retention of urine, Mr. Lund mentioned three striking cases. One was that of a young lady in whose case he was called in consultation to perform paracentesis: retention of urine was found. Another was that of an elderly man, with what was supposed to be a pelvic tumor pressing on the rectum, and causing tenesmus and difficulty in defecation. A quart of urine was drawn off, and the urgent symptoms soon disappeared. Another case was that of an elderly gentleman, who was suddenly seized with giddiness and rigors while at work in his office. Profuse perspiration came on. He went to bed and vomited. The abdomen was distended, and hernia was suspected. Mr. Lund catheterized and removed five pints of urine. Mr. Lund's second case reminded me of one recorded in Dr. Mathews Duncan's "Clinical Lectures." Dr. Duncan was sent for to pay a "satisfaction" visit to a patient said to be dying with malignant disease of the rectum. He was told that the growth could be felt in the iliac region, so far had it advanced. On examination the case was found to be one of enormous fecal accumulation in the bowel. On "digging" this out, the symptoms disappeared.

When puncture of the bladder is required, Mr. Lund prefers the suprapubic method. "It is," he says, "cleaner, and an instrument can more easily be retained."

In infants, circumcision should always be performed, he thinks, when the prepuce "balloons out" during micturition. Otherwise the straining tends to cause inguinal hernia. When a hernia has been produced Mr. Lund prefers the "worsted truss."

A case of vesical calculus was described in which the symptoms of stone were marked by enlargement of the prostate. The stone was kept from pressure on the collapse of the bladder, and perhaps kept in one place by its shape, it having become moulded to the neck of the bladder above the base of the prostate. Another case was mentioned in which the converse occurred, viz., a stricture far back in the membranous urethra caused such dilatation of the prostatic portion as to set up symptoms of calculus, which subsided on division of the stricture. An interesting case was referred to by the lecturer, in which a "click" was heard on introducing a metallic catheter into a woman's bladder, after a sound had failed in producing any. It was afterward found that this only occurred when the stream of urine was stopped by placing the finger on the mouth of the catheter. The bladder possessed great expulsive power, and while the urine flowed freely there was no sound.

The decision in favor of quarantine lately pronounced by the International Sanitary Conference, sitting in Rome, has caused great dissatisfaction here. The British members of the Conference were strongly against quarantine, believing it to be useless. It is thought that, in the event of five days' quarantine being imposed on vessels passing through the Suez Canal, many British shipowners will send their vessels by the old route round the Cape of Good Hope, so as to avoid the delay in the canal and also the canal dues.

A few years ago sanitarians were very indignant to learn that a large dust-sifting yard immediately adjoined the filter-beds of one of the London water companies. To this yard quantities of dust were daily brought and sifted, etc., with effects which may be imagined, especially when a strong wind blew in the direction of the filter-beds. The contents of our dust-bins, too, rarely consist of dust and ashes alone. Few householders trouble their heads about the state of the dust-bin, and the consequence is that all manner of rubbish and garbage is placed therein by servants. The wealthier the district the more the nuisance generally, because the servants are left more "to work their own sweet will." Add to this that it is a chronic complaint among householders that the dustman will not call except at infrequent intervals, and some idea may be formed of the decomposing mass which is daily shot down in the dust-yard mentioned. After letting the nuisance go on for years the Water Company have (in a bill now before Parliament) sought powers to purchase the yard from the Brighton Railway Company, who own it. The Select Committee of the House of Lords have, however, thrown out this clause on the opposition of the Railway Company. So all is to go on as before. Our boasted sanitary laws seem somehow often to fail us just when they are most wanted.

LONDON, June 29, 1885.

The first revision, or second edition, of the official "Nomenclature of Diseases" has just been issued, and is in process of distribution to the profession. I have been able to obtain an early copy and look through it with some care. I subjoin some notes of the changes found. They are more numerous and extensive than might, perhaps, have been expected. Sixteen years have, however, elapsed since the first appearance of the work, and during this period the advance in all branches of the medical sciences has not been small. The actual revision has occupied nearly five years.

A very useful "Enumeration of Morbid States and

Processes" is now prefixed to the whole work. This is a modification of the list prefixed in the first edition to the sections on "Local Diseases," but now precedes the section on "General Diseases," "on the ground that its constituents are in various associations the elements of all the diseases subsequently tabulated." It is suggested in the preface that this table may form, in conjunction with the other sections, the basis of a cross-tabulation "in which the horizontal lines of this alphabet may cut the vertical lines of an anatomical alphabet."

The section formerly entitled "General Diseases" is now named "Diseases of the Whole Body," and diseases which may be distributed in several parts at one time, "General Diseases."

This section is divided into four groups—*A*, *B*, *C*, *D*.

Group *A* includes the specific febrile diseases, which are arranged in five subgroups. The first point noticeable under individual diseases is that all definitions are now omitted, which is indeed the case throughout the work. No varieties of small-pox or scarlatina are now given. German measles is introduced under the name "Epidemic Rose-rash." Under "Enteric Fever," there is a note that when occurring in children it should not be returned as "infantile remittent fever." Typho-malarial fever is introduced as a variety of enteric fever. "Choleraic Diarrhœa" is replaced by "Epidemic Diarrhœa." The terms "ague" and "remittent fever" are removed, and in their place is given "Malarial Fever: *a*, Intermittent; *b*, Remittent; *c*, Malarial Cachexia." Diphtheritic paralysis is now placed among nervous affections. Equiniamitis has disappeared, but horse-pox has been introduced. Malignant pustule gives place to splenic fever. Anthrax is no longer given as an equivalent for splenic fever, but is reserved as a synonyme for carbuncle. Sloughing phagedæna and hospital gangrene do not now appear as distinct affections, but simply as varieties of phagedæna. Puerperal fever is no longer to be used to describe puerperal pyæmia, septicæmia, or erysipelas, but the latter terms are to be employed. The only varieties of syphilis now enumerated under the heading "Syphilis" are, "*a*, Primary, Hard-chancre, or Infecting Sore; *b*, Secondary, or Constitutional." [In the first edition syphilis included soft-chancre, suppurating bubo, phagedænic sore, sloughing sore.] Lupus and ergotism vanish from the list of general affections, the former finding a place among skin diseases, the latter among poisons. Only two forms of rheumatism are now mentioned, viz., rheumatic fever and rheumatism. The latter term includes the subacute and chronic varieties. Gonorrhœal rheumatism finds a place amongst joint-affections. Gout is no longer divided into acute and chronic. Osteo-arthritis loses its former prefix of "chronic." Hydrophobia is now classed as a general disease instead of a nervous affection. Scurvy and alcoholism form, along with surfeit and starvation, Subgroup 4 of "General Diseases," viz., "Diseases Produced by Errors of Diet." Delirium tremens has been removed from the list of nervous diseases and placed as a variety of alcoholism. Myxœdema, glycosuria, hæmophilia, and pernicious anæmia, may all be noted as additions. Leucocythæmia is also new to this section, though not to the whole work, it having formerly been classed as a splenic disorder. Tubercle now stands alone, instead of as a variety of scrofula.

Diabetes is now named diabetes mellitus (under renal affections we now find diabetes insipidus). True leprosy now figures simply as leprosy, and two varieties of it are now mentioned, viz., the tubercular and anæsthetic forms.

Considerable changes are made among the local diseases. Of these some of the most important are among the nervous diseases. The term sclerosis is now for the first time introduced, and three varieties are recognized, viz.: 1, Insular or disseminated; 2, diffuse; 3, miliary. Its varying distributions are thus given: *a*, Of the anterior cornua of the gray matter of the spinal cord (progressive muscular atrophy); *b*, of the lateral columns (spastic spinal paralysis); *c*, of the posterior columns (locomotor ataxy). The following are additions to this section: Opthalmoplegia externa (interna is not referred to), glosso-labio-pharyngeal paralysis, acute ascending paralysis, paralysis after acute disease (diphtheritic paralysis being given as a variety of this), pseudo-hypertrophic paralysis, toxic paralysis (lead palsy is given under this with drop-wrist as a variety of it), aphasia, dumbness (included in last edition, but placed under "Diseases Manifested at or soon after Birth"), somnambulism, megrim, and hystero-epilepsy (as a variety of hysteria); Ménière's disease (as a variety of vertigo), and hemichorea (as a variety of chorea), the division of chorea into acute and chronic being at the same time abandoned. Epileptic vertigo, or *petit mal*, is no longer recognized as a variety of epilepsy. Paralysis agitans displaces the term shaking palsy, and convulsions gives way to eclampsia, and in a note it is stated that when the cause is known the return should be made under the head of that cause.

Hypochondriasis, which formerly appeared as the last among functional nervous disorders, now leads the way among disorders of the intellect. The term insanity comes next, and now appears for the first time. A note states that this term should be employed only when the case does not manifestly come under the heads of one of the affections afterward enumerated. Imbecility no longer finds a place as a heading. Congenital imbecility is given as a synonyme for idiocy, and acquired imbecility is included under dementia. The latter is no longer divided into acute and chronic. The following headings are all new to this section: Puerperal Insanity, Epileptic i., Insanity of Puberty, Climacteric i., Senile i., Toxic i. (from alcohol, gout, lead, etc.), Traumatic i., insanity associated with obvious morbid change or changes in the brain, and finally consecutive insanity, from fevers, visceral inflammations, etc.

The classification of ocular affections is much more full and complete. Serous, gouty, and sympathetic forms of iritis are now added, and tubercular takes the place of scrofulous iritis. Keratitis is now more clearly divided into varieties, vascular keratitis being now recognized, and two forms of this, viz.: 1, Pannus; 2, deep vascular keratitis. Retinitis and glaucoma are each now divided into varieties. Cataract is more scientifically subdivided. Various forms of squint are now given. Protrusion of the eye-ball is now named proptosis. Among additions may be noted the following: myosis, mydriasis, synechiæ, iridoplegia, nystagmus, epiphora, and diseases of the optic nerve.

Under heart-diseases, hæmo-, hydro-, and pneumo-pericardium now gain admittance to the volume. The diseases of the peri- and endo-cardium are now given together as "diseases of the membranes." Suppurative pericarditis is now given as a variety of pericarditis, and pyæmic pericarditis is also added in the same place. Tubercular peritonitis is omitted, but tubercle is given as a separate heading. Periarteritis and endarteritis are now given as varieties of arteritis, but we look in vain for endarteritis obliterans. Syphilitic disease and parasites are added to the list of cardiac affections. The arterial degenerations are now given together as varieties under the heading "Degeneration." Fatty degeneration distinct from atheroma is not recognized. Under aneurisms we now get dissecting and miliary as varieties in addition to the three previously given, viz., fusiform, saccular, and diffused.

Turning to respiratory diseases, croup still retains its place, although many British pathologists and physcians strongly maintain its identity with diphtheria. Three forms of laryngitis are now given, viz., acute, chronic, and catarrhal, the latter being now introduced. Perichondritis is placed as a variety of inflammation of the larnyx. Bronchitis was formerly divided simply into acute and chronic; two new varieties now appear as well, viz., catarrhal and plastic.

Hæmoptysis formerly appeared as a variety of three affections, viz., passive congestion, pulmonary extravasation (p. apoplexy), and also among the general diseases under Phthisis, the latter disease being given under "Scrofula" as a local scrofulous affection. Passive congestion now stands alone. Hæmorrhage appears as a new heading, and hæmoptysis and pulmonary apoplexy are given as varieties of it. The terms acute pneumonic phthisis and chronic pneumonic phthisis remain as in the former edition, but the terms phthisis and acute miliary tuberculosis are now removed. They formerly appeared in the section on General Diseases, with a cross-reference to them in this section. There is now a cross-reference to the new heading, "Tubercle," in the section on General Diseases, and a note that the return is to be made according to a table on a subsequent page (under Tumors), which has been drawn up by Dr. Bristowe. In this table tubercles are divided into gray and white. Four varieties of each are given, viz., simple, inflammatory, ulcerative and destructive, retrograde and cicatricial. Pneumonia is divided into lobar and lobular, and croupous and catarrhal are added as synonymes. Syphilis (of the lung) is now inserted in place of the old term syphilitic deposit.

The inflammatory affections of the intestines are now given under a new heading—Inflammation—three varieties being enumerated, viz., catarrhal, diphtheritic, and ulcerative (enteritis, typhlitis, and colitis given as three subvarieties of this). Post-peritoneal and omental are added to the varieties of hernia. Among hepatic disorders, cirrhosis and hepatitis no longer retain their positions as distinct headings. In their stead Inflammation is placed as a heading, and three forms are described, viz., hepatitis, perihepatitis, and cirrhosis, the latter again being divided into hobnail liver and hypertrophic cirrhosis. "Adhesions" now form a separate heading under peritoneal diseases, instead of being placed under Peritonitis. Perityphlitis is not mentioned anywhere.

Hypertrophy, atrophy, and passive congestion (in diseases of heart and lungs) are added to the list of kidney affections. The nomenclature of renal disorders has undergone a great alteration. In the first edition "Bright's Disease" was given as a general heading and "Albuminuria" as a synonyme. Acute and chronic forms of Bright's disease were recognized, and three varieties of the latter were made to exist according as the kidney was granular, fatty, or lardaceous. Acute nephritis is now separated from Bright's disease, and forms a heading by itself, "glomerular nephritis" being named as a variety of it. Lardaceous kidney is also placed apart, and the only two forms of Bright's disease now acknowledged are: 1, chronic nephritis (chronic parenchymatous nephritis), and 2, granular kidney (chronic interstitial nephritis). Many will regret the separation of the lardaceous form. A new heading is now given, viz., Urinary Disorders. Suppression of urine is now placed under this heading instead of under kidney diseases. Here also are arranged the following new terms: Hæmaturia (in place of hæmaturia renalis), intermittent hæmaturia, chyluria, albuminuria, lithuria, oxaluria, and phosphuria. Diabetes insipidus also here finds a place, and a cross-reference to diabetes mellitus and glycosuria is prefixed to the list of urinary disorders.

The classification of vesical calculi remains virtually unaltered. Inflammatory stricture is now omitted as a variety.

Six varieties of ovarian cyst are now recognized. Inflammation and distention with blood are now added to the list of affections of the Fallopian tubes. The terms salpingitis and hæmatosalpinx are introduced as synonymes for the two preceding affections, and also hydrosalpinx as a synonyme for dropsy of the tube, but pyosalpinx has not been admitted. Instead of "Diseases of the Broad Ligaments," the heading now is "Diseases of the Uterine Ligaments, and of the Adjacent Peritonæum and Cellular Tissue." Under this heading are: hæmatocele, inflammation, abscess, cyst, varix, thrombosis, and a cross-reference to non-malignant new growth. It is now recognized that hæmatocele may be either intra- or extra-peritoneal, and it is divided accordingly. Inflammation is divided into—*a*, Pelvic peritonitis (Perimetritis); *b*, Pelvic cellulitis (Parametritis); *c*, Lymphangitis. Subinvolution and hyperplasia are now given for the first time as varieties of hypertrophy of the uterus in addition to elongation of the cervix, which was the only variety previously given. Atrophy is now divided into two varieties, viz., superinvolution and senile atrophy. Inflammation of the uterus (including the cervix) is divided into catarrhal and granular. Metritis is given as a general synonyme for uterine inflammation, and endometritis as an equivalent for catarrhal inflammation. Distention of the uterus is now deemed worthy of recognition as a distinct affection, and is divided into three varieties, according as the distending agent is blood (hæmatometra), secretion (hydrometra), or pus (pyometra). Leucorrhœa no longer appears as merely a synonyme for uterine or vaginal catarrh, but as a distinct affection. Inflammation of the vagina is divided into catarrhal and gonorrhœal, an arrangement which is certainly open to objection on clinical grounds. Sterility, vaginismus, and dyspareunia are additions, the latter two affections being distinguished from each other. Vicarious menstruation is replaced by the term ectopic menstruation; two varieties are allowed of this, viz., vicarious and supplementary. The displacements of the gravid uterus are now (omitting inversion) made to correspond with those of the unimpregnated organ. Rheumatism of the uterus has been expunged. The section devoted to affections connected with pregnancy has been retained, although the preface states that it has been omitted. Ectopic gestation now occurs in place of extra-gestation, and is divided into six varieties. Cerebral hæmorrhage has been added to the causes of sudden death after delivery.

Hypertrophy of the bones is now divided into concentric and eccentric, osteoporosis being given as a synonyme of the latter. Osteo-myelitis is now classified as a variety of osteitis, and osteitis deformans and perichondritis are also now added as varieties. Necrosis is divided into central and intra-osseous. Fatty degeneration of bone appears as a new affection. Three forms of ankylosis are now enumerated. Charcot's disease is set down among joint affections, with a direction to return cases of it under locomotor ataxy.

HOW TO REMEDY THE GROWING ABUSE OF MEDICAL CHARITY.

To the Editor of The Medical Record.

Sir: The recent exposure made by the Charity Aid Association, of the high percentage of unworthy patients treated in one of the largest and most carefully managed medical charities of this city, should lead the managers of all like charities to the work of looking into the facts of how this munificence is being expended. It has been, and is now, the practice in every institution in this city, open for the relief of the sick poor, to treat all who may apply without question, so that none may suffer; but this has been abused shamefully and to the extent that it is honorable now to ask and accept medical alms by anyone, whatsoever his or her station in life may be. Now all will agree unless the few who wish to take advantage of the humanely disposed for selfish ends that this is not right, and tends to cultivate a spirit in society which should be suppressed, and if necessary by vigorous means. And now comes the question, How can it be done?

To make it effective, the means employed certainly should be applied uniformly to every institution dispensing such aid. If it were otherwise, the unworthy applicants would go from the one refusing to another which would ask no questions. The plan of posting in the institutions the notice in full view, "*Only for sick poor*," has had no effect, for in another like institution it will be

confronted by a notice, "*Medicine and medical aid furnished for one dollar a month*" to all applicants, and depends on the personal pride and honor of the patients to forbid frauds. This plan we all know has not succeeded, but has rather cultivated this alms-receiving tendency to the extent that it is now expected as a right, by the unworthy as well as the worthy. The most feasible method for preventing this growing evil which occurs to me is to arrest it at the institution—to make it by law a misdemeanor for any institution to so indiscriminately dispense alms. Surely this is reasonable. The city which has been so munificent in its gifts to all such societies would favor, I am certain, this step and hail it as one in the right direction. Private parties who give of their means, whether it be in either large or small amounts, do so always with the impression that the sum will be used by the trustees wisely, and where it is needed, and only there; if in any other manner, they will consider that the funds intrusted have been misused and turned from their legitimate channel.

I therefore suggest that every charity institution should be prohibited by law, under penalty, from giving this aid to these applicants, unless they are known to be worthy or recommended as such by responsible parties.

ALEXANDER HADDEN, M.D.

[Dr. Hadden has had such a long experience in hospital and dispensary practice that his suggestions merit more than ordinary consideration. It is to be hoped that the managers of charitable institutions will give that attention to the subject that its importance demands. If they will not move in the matter the profession will. The rank and file of practitioners in this city are in earnest in their endeavors to check an evil which now has grown to monstrous proportions, and which threatens the bread and butter of everyone who is willing to work honestly and legitimately.—ED.]

RUPTURE OF THE PERINEUM.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR: In your issue of the 20th inst., Dr. Frank H. Hamilton, in an article entitled "A Few Practical Remarks on Rupture of the Perineum," maintains, if I understand him, that any manual interference with the natural process of labor, looking toward the preservation of the perineum from rupture, is, as a rule, not only useless, but may be hazardous.

I cannot agree with him.

Leaving out for the present the consideration of cases in which rupture results from malformations, cicatrices, unusual size of child's head, etc., I think it safe to say that tearing of the parts in question is almost always not only avoidable, but its occurrence is frequently a serious reflection on the medical attendant.

In the lying-in wards of Professors Spaeth and Carl Braun, at the General Hospital, Vienna, the writer has seen many perineums preserved, has saved many himself, and is, therefore, able, from observation and personal experience, to bear witness to the usefulness of this practice. The more simple measures failing, recourse should be had to episiotomy—that is, incising the margin of the vulva on one or both sides, thus enlarging the outlet. Such incisions heal quickly, and, as compared with perineal rupture, are altogether insignificant. And this episiotomy is a very necessary measure when, after the outlet is distended to its full capacity and rupture is imminent, there remains no alternative but laceration. Of two evils the less should be chosen. Dr. Hamilton's cases, in which he has seen the perineum stretch to the thinness of paper and then suddenly give way, possibly might have been saved had an episiotomy been performed. The statistics of the Vienna Hospital[1] show that, by proper care, ruptures may be reduced to a small fraction of one per cent., whereas writers on obstetrics have claimed ten or fifteen per cent. unavoidable.

[1] American Journal of Obstetrics, vol. xviii., No. 3, p. 233.

What, then, are the appropriate means for preserving the perineum? Certainly not simple pressure against that structure, for such practice would not only be indeed useless, but absurd. Other means must be resorted to, the objective point being to gradually stretch the outlet so that the head may be safely expelled, which is accomplished by allowing the head to descend again and again hard against the perineum; in this way that structure is not taken by surprise, and the head is prevented from a too early and sudden tearing through of undilated parts. This is very practicable, though it sometimes requires all the available muscular strength of the accoucheur. Then, at last, after full dilatation of the outlet, if it be found impossible to deliver the head without a laceration, an episiotomy should be made, and for that purpose a bistoury should be at hand in anticipation of such a contingency.

The theory is easily understood, but practice alone can perfect the art. For ease and convenience the woman should be delivered on the left side. As she lies obliquely across the bed with the hips on the right edge, the nurse supporting the raised right knee, the physician sits behind, his left hand between the thighs and covering the vulva; the right, with a towel intervening, over the perineum, though never hiding it from view. As the head is pushed down by the uterine contractions and the voluntary efforts of the woman, it is held from advancing too far, if necessary, by clasping the hands firmly against it. When the head has advanced far enough and the parts are sufficiently dilated, it is slowly and carefully shelled out between the pains, the woman assisting, if necessary, by voluntary expulsive efforts, as directed by the physician. Care should then be taken that the shoulders do not cause the injury the head has been prevented from producing. The writer is convinced that he has in this manner prevented a considerable number of otherwise unavoidable ruptures, and he confidently recommends such practice.

S. A. RUSSELL, M.D.

135 NORTH PEARL STREET, ALBANY, N. Y.,
June 24, 1885.

New Instruments.

A MODIFIED HYPODERMIC SYRINGE.

THE accompanying illustration represents the "Farny" hypodermic syringe, an instrument which presents some manifest advantages. The glass barrel is accurately graduated, and the index is marked on both the barrel and the piston-rod. The barrel-gauge is engraved on parchment, and attached to the cylinder in such a way that, when the syringe is filled with any clear solution, it serves as a lens to magnify the markings, enlarging the figures to some four or five times their natural size. Each syringe has a screw-cap fitting on the thread designed for the needle. When not in use the cap is applied, rendering the syringe air-tight, and preventing shrinkage of the packing. The vial has a capacity of sixty minims, and is provided with a soft-rubber cork having a small round hole in the centre. Over the cork fits a stopper which renders the vial air-tight, but even when the stopper is off the bottle may be laid down on the table, and no fluid will escape through the centre hole. To fill the syringe from the bottle, the needle should be inserted through the rubber cork, and the shoulder held firmly,

stopping up the opening. Then the piston, which had previously been drawn out, should be pushed home, thus forming a layer of compressed air above the fluid. Then, when the piston is again withdrawn, the pressure within the vial and the vacuum within the cylinder will cause the fluid to enter the syringe at once, without wasting a drop. The case, as represented in the figure, is made of plated metal, and contains the syringe, vial, two needles, and a bunch of wire. All of these are held in position by springs, so as to prevent spilling when the case is opened. It is manufactured by F. A. Reichardt, of this city.

ELECTRIC ILLUMINATORS FOR EXAMINING VARIOUS CAVITIES OF THE HUMAN BODY.

INVENTED AND MANUFACTURED BY CURT W. MEYER, NEW YORK.

THE electric illuminator for the mouth and throat consists of a combination as shown in the illustration below, viz.: A novel form of tongue-depressor *T*, with an insulating handle attached, through which the conducting wires are passed to connect with the battery cords at *P P'*; an electric incandescent lamp *L*, mounted and set into a shield-tube *H* (a non-conductor of heat), with a double conducting ball-joint movement *J*, and an adjustable slide *S* which holds the lamp, and which is held firm to the tongue-depressor by a set-screw *B'*.

It will be seen at once that every desired movement of the lamp has been provided for. The lamp may be set firm by pressure of the binding screw *B*; further, the position of the lamp on the tongue-depressor can be changed, as it will slide back and forward. The lamp can be instantly brought in broken circuit at *i'* by slightly turning the lamp-tube *H*, and the latter with its ball-joint can be at once detached from the tongue-depressor.

The lamp now can be set into another insulating handle (forming the universal illuminator) at *J*, if the light is to be used for further examinations. The mounted lamp can be removed from the shield-tube *H*, if necessary, by pushing it out of the tube through slot *S*. A duplicate mounted lamp, also a mouth-mirror with handle, are added to complete this set of instruments, which are fitted in a finely finished pocket-case lined with velvet.

These instruments in their present form will be found to be an invaluable assistant to physicians and dentists, and their substantial workmanship will make them a lasting apparatus.

PROFESSOR ZWEIFEL ON RULES OF MEDICAL BEHAVIOR.—Dr. Albert S. Adler, of Solomonville, A. T., sends us some criticisms on the astute and popular author of "The Physician Himself," concluding with the following: "I remember but too well the words of the eminent Professor Zweifel in Erlangen, 'that rules in regard to medical toil and human delicacy are the acquisitions of a general education, and for this very reason words would be superfluous to the one, to the other useless. He who does not possess the intelligence to learn quickly from the example set by his preceptor, can never gain it by the medium of words.'"

Army and Navy News.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from June 4, 1885, to July 11, 1885.

HAVARD, VALERY, Captain and Assistant Surgeon. Assigned to duty at Fort Wadsworth, New York Harbor. S. O. 140, Department of the East, July 2, 1885.

WYETH, M. C., First Lieutenant and Assistant Surgeon. Assigned to duty at Fort Wayne, Mich. S. O. 140, Department of the East, July 2, 1885.

POWELL, JUNIUS L., Captain and Assistant Surgeon. Ordered from Department of the East to Department of the Missouri. S. O. 155, A. G. O., July 9, 1885.

BIRMINGHAM, HENRY P., First Lieutenant and Assistant Surgeon. Ordered from Department of the Missouri to the Department of the East. S. O. 155, A. G. O., July 9, 1885.

Official List of Changes in the Medical Corps of the Navy for the week ending July 11, 1885.

BYRNES, J. C., Passed Assistant Surgeon. Detached from the Powhatan for duty at Navy Yard, Norfolk, Va.

CORDEIRO, F. J. B., Assistant Surgeon. To the Powhatan as relief of Passed Assistant Surgeon Byrnes.

CURTIS, L. W., Assistant Surgeon. To Philadelphia for examination preliminary to promotion.

DRENNAN, M. C., Surgeon. Placed on waiting orders.

FITZSIMMONS, P., Surgeon. Duty on Receiving Ship Franklin, Norfolk Navy Yard, continued until July 1, 1886.

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service, for the two weeks ending July 11, 1885.

FESSENDEN, C. S. D., Surgeon. Leave of absence extended sixteen days, on account of sickness, July 1 and 9, 1885.

BENNETT, P. H., Assistant Surgeon. Granted leave of absence for twenty-two days, July 9, 1885.

Medical Items.

CONTAGIOUS DISEASES—WEEKLY STATEMENT.—Report of cases and deaths from contagious diseases reported to the Sanitary Bureau, Health Department, for the week ending June 27, 1885:

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-spinal Meningitis.	Measles.	Diphtheria.	Small-pox.	Yellow Fever.
Cases.								
July 4, 1885.....	0	12	46	1	109	70	0	0
July 11, 1885.....	0	11	31	4	69	50	3	0
Deaths.								
July 4, 1885.....	0	3	9	1	21	34	0	0
July 11, 1885.....	0	3	3	4	18	18	0	0

AN ENGLISH SURGEON ON VIVISECTION.—Is it simply an impenetrable dulness which causes a man of surgical education like Mr. Lawson Tait to make such a statement as the following, at a recent meeting of the English Anti-vivisection Society: "I am quite sure," he said, "that many even of the vivisectors themselves will come to the conclusion which the lessons of surgery and pathology have taught me, that vivisection is not only useless in solving riddles such as we have to deal with, but that it is absolutely misleading."

The Medical Record

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Original Articles.

THE ACRO-NEUROSES.

FUNCTIONAL NERVOUS AFFECTIONS OF THE EXTREMITIES.

BY C. L. DANA, M.D.,

PROFESSOR OF NERVOUS AND MENTAL DISEASES, NEW YORK POST-GRADUATE MEDICAL SCHOOL; PROFESSOR OF PHYSIOLOGY, WOMAN'S MEDICAL COLLEGE OF NEW YORK.

(Concluded from page 58.)

SENSORY DISTURBANCES.—These are known under the names of paræsthesia, ignipedites, acrodynia, neuralgia, hyperæsthesia, pododynia, tarsalgia, hyperæsthesia.

Paræsthesia.—Under the head of paræsthesia are included the sensations of prickling, numbness, burning, etc., which are familiar to every physician. Some have given a special name to that variety of paræsthesia in which there is an intense burning sensation. Mitchell calls it causalgia, and finds it to be the result of nerve injury. In the multiple neuritis of alcoholism, beri-beri, acrodynia, and ignipedites, this symptom is a very prominent one. Hence it is safe to say that an intense persistent burning sensation indicates some organic peripheral nerve trouble. We can hardly say this of the milder "burning sensations," which are simply to be classed with ordinary rheumatic or neurasthenic "paræsthesia." This ordinary type of functional paræsthesia has been well observed and described by Drs. Ormerod, Wharton Sinkler, Weir Mitchell, and J. J. Putnam. It occurs oftenest in women, and at about the time of the climacteric. The patients experience annoying sensations of numbness, prickling, or burning in the hands, arms, or, perhaps, feet. The symptoms are worse at night, but generally continue through the daytime. There may be a slight loss of power in the arms.

I have notes of thirty-one cases of this trouble. Of these the burning sensation was the most complained of in eight.

CASE IV.—Mrs. Mary A——, aged thirty-nine, came to me complaining bitterly of burning sensations in her hands and feet. These were worse at night, and sometimes kept her from sleep. She has always been "nervous," lately very much so, but has no hysterical history. She is slightly anæmic, dyspeptic, and constipated. The extremities present no objective changes. She improved under local and general treatment.

Among the other cases the "burning" seems to have occurred in young and hysterical or in older neurasthenic and rheumatic women. In one case of ignipedites the cause was a change from wooden clogs to leather shoes.

A very severe type of the ordinary form of paræsthesia was the following:

CASE V.—Mary G——, a hard-working German woman, fifty-four years old, came to me complaining of prickling and numbness in the two hands and in one heel. The symptoms were much worse at night, and were so intense that she had to wrap her hands up in flannels, and could not sleep on account of the intolerable sensations. No anæsthesia, no objective changes in hands, urine normal, bowels regular, no rheumatism. Patient had been healthy, not nervous, had thirteen children. Under tr. nuc. vomic. she soon got well.

Of twenty-eight of my cases of paræsthesia available for analysis nine were among men, nineteen among women. The age in women ranged from nineteen years to sixty-six, most cases occurring between thirty-five and fifty-five. In men the average age was older.

In five cases there was a history of rheumatism, in eight of overwork and worry, alcoholism and sexual excess each brought on the symptom in one case. In the younger cases there was hysteria and anæmia. In eight cases it was unilateral. We may say in general that the purely neurotic type of paræsthesia is comparatively rare. I have met two examples of it.

CASE VI.—A gentleman about forty years old, a cotton-broker, was sent to me by my friend Dr. S. Baruch, suffering from paræsthesia of the left arm and hand. He felt an almost constant sensation of numbness, prickling, etc., extending up to the elbow. The symptom annoyed him to the last degree, the annoyance depending partly on the fact that he was afraid he was going to be paralyzed. There was no anæsthesia and no objective change in the hand and the patient was in good general health. He had been a great smoker. He left off smoking, but was no better. He was treated in various ways with but little improvement. He went to a well-known general practitioner, who gave him Warburg's tincture and said he would be well in eight days. He was not, but after several months, the cotton market getting easier, the affection gradually left him.

Paræsthesiæ of course occur in organic diseases of the nerve-centres or nerves. Sometimes, also, these symptoms are brought on by lead-poisoning (Putnam), or by arsenic (Seguin), or by alcohol or tobacco. These facts must be borne in mind in making a diagnosis. When the symptoms are very severe and persistent we should always suspect a toxic or infective neuritis. Many ordinary cases of ignipedites are caused mechanically by badly-fitting, or thin-soled shoes, or by long standing or walking.

The treatment for neurotic cases is in the use of strychnia, bromides, alkalies, and electricity, galvanism being, I think, far the most efficient form. For the rheumatic types, oil of gaultheria, potassium iodide, and electricity may be given. Hot and cold douches to the parts are often excellent. Of course, attention must be paid to general hygiene.[1]

Ignipedites, or "burning feet," technically speaking, is the name given to a disease observed among soldiers in India in the early part of this century, and first described by Dr. Grierson. The disease is a depressive, constitutional one, resembling in some respects, scurvy. Later investigations have shown its close relation with acrodynia, and beri-beri. In all three of these diseases

[1] *Causalgia* is a name suggested by Dr. Weir Mitchell for the burning sensations that occur as the result of nerve injury. The symptom is the result of peripheral nerve-lesions and cannot be spoken of as a neurosis.

an intense and agonizing burning in the soles of the feet and sometimes in the hands is observed. Beri-beri is known to be an infective multiple neuritis. Ignipedites is doubtless also caused by a neuritis.

Acrodynia (cheiropodalgia) is a term employed to designate a peculiar disease, generally epidemic and characterized by severe pains in the extremities. It was first observed as an epidemic in Paris in 1828. Later it occurred among the workmen in a fuchsin factory at Lyons in 1864, in the French Army of the East in 1854, and again among French soldiers in 1874. It broke out also in a convent of St. Bernard in 1846, and a disease very similar to it has been described in Italy and Spain.[1] It has occasionally occurred sporadically. Some have claimed it to be only the Italian disease pellagra; others, trichinosis. It seems, however, as I have stated, to be most allied to the ignipedites of the Indian soldiers and to beri-beri. It is characterized by severe pains and erythema of the extremities. This is accompanied with painful muscular contractions, and followed by paresis and anæsthesia. There are also marked digestive disturbances. The disease runs its course and the patients generally recover in a few weeks. It is probably an infectious multiple neuritis—a view suggested by Broussais.

Acrodynia is a disease which has not been observed in this country to my knowledge, although the term has been wrongly used to indicate a painful neuralgia of the finger (Pancoast, *Philadelphia Medical Times*, 1872).

Hyperæsthesiæ and neuralgiæ of the extremities.—Both feet and hands are subject to hyperæsthesia and to neuralgic pains. A hyperæsthetic condition may exist entirely apart from any paræsthesia and neuralgia, although these latter are generally associated with it.

Hyperæsthesia in a most marked form has been observed in chronic alcoholic poisoning. Plantar hyperæsthesia not rarely occurs as the result of mechanical causes, from wearing thin-soled or ill-fitting shoes.

Some cases of plantar hyperæsthesia in which the trouble appears to be a pure neurosis are reported. M. L. Barbillou has recently described cases of this kind (*Progrès Médicale*, 1885, p. 375). His cases, four in number, were observed in the service of M. Debove and Dr. Rueff. The patients were all men, without any neuropathic history, and gave no signs of organic disease, local or central. They had no pains in the feet, but simply an exquisite sensitiveness which made walking almost impossible. One patient had gonorrhœal rheumatism; in another, and I fear in all, alcoholism could not be positively excluded. All the patients were cured by blistering the feet or by congelations with Debove's chloride of methyl.

Neuralgias of the feet and hands.—These seem to be of two classes: Reflex neuralgias, and neuralgias due to some mechanical fault in the foot. Under this latter head come Morton's luxation neuralgia, and the so-called Tarsalgia, or Policeman's disease. It is a question whether there is such a disease as the pododynia or tailor's neuralgia, described by Gross in his "System of Surgery." I know no one who has ever seen it or reported a case. A form of neuralgia accompanied with spasmodic contracture of certain leg-muscles, described by Weir Mitchell, belongs apparently with the tarsalgia of the French writers. Besides these types, I have observed some curious forms of acro-neuralgia which it is difficult to classify.

Reflex neuralgias of the extremities are not rare.

One of the most distressing forms which I have seen was the following, occurring in a patient sent me by my friend, Dr. J. R. Nilsen:

Case VII.—*Reflex neuralgia of hands in a pregnant woman.*—Margaret M——, aged thirty-five, English. Has always been healthy, though of a nervous temperament. Has never had neuralgia before. Is now pregnant for the first time. Since about the third month she has suffered from pains in the fingers of both hands. The trouble began in the left hand, with a diffused pain affecting the fingers and thumb; the right hand then became involved. Pains ran up to the elbow at times; they were continual, day and night, so that she could not sleep; worse in warm weather. There was no local swelling, tenderness, vaso-motor disturbance, or sweating. Dynamometer, right hand, 28; left, 20. Sensation and muscular sense normal; no twitchings or cramps. Under anti-rheumatics no relief was obtained. Strychnine did no good, but under local galvanization and bromides she improved. This was undoubtedly a reflex uterine trouble, which will disappear after the birth of the child.

Dr. Nilsen tells me of a patient of his who suffered from ovarian irritation and prolapse. She had intense neuralgic pains in the wrist.

I am treating now a hysterical woman with paraparesis and painful spasms of the bladder. Every time she has the painful expulsions of urine an intense pain is felt in the palms of the hands.

Reflex pains in the feet are not so very uncommon. Dr. T. B. Curtis (*Boston Medical and Surgical Journal*, 1881, No. 14) has taken the trouble to collect all the causes of reflex pedal pain. They, almost all of them, consist in some form of irritation of the genito-urinary tract, *e.g.*, gonorrhœa, stricture of the urethra, vesical calculus, cysto-prostatitis, cystalgia, renal calculus.[1]

Neuralgic and other painful affections of the extremities due to mechanical cause.—One of the most interesting forms of pedal neuralgia is that described first by Dr. Morton, of Philadelphia, and called by him a "luxation neuralgia." It is a neuralgia affecting the metatarso-phalangeal joint of the third and fourth toes, and is due, it is thought, to a slight luxation, with consequent pressure on a digital branch of the external plantar nerve. Dr. Morton collected fifteen cases (*American Journal of the Medical Sciences*, 1876, n. s., lxxi., p. 37). A case has subsequently been reported by Dr. M. C. Kemper (*Virginia Medical Monthly*, 1881–82, vol. viii., p. 522). It occurs generally in women, and the cause is external injury or shoe-pressure. Treatment is not very satisfactory. It should be directed to giving rest to the foot, and the avoidance of lateral pressure on the joints by wearing a broad-soled shoe. Support may be given by a broad flannel bandage. Amputation of the toe has cured one case.

The following case seems to belong to this category:

Case VIII.—*Luxation podalgia (of Morton) in a woman fifty-five years of age.*—The patient has always been healthy, has had several children. Is thin, of nervous temperament, energetic, and hard-working. Has not had rheumatism or gout. Has acted as a nurse for several years past, and been on her feet a great deal. This, at times, caused plantar hyperæsthesia and neuralgia, relieved by rest. In past years has, at times, suffered from pains in third and fourth toes and metatarso-phalangeal joints of right foot. Cannot attribute it to injury or any cause except excessive standing and overwork.

In the last few months she has had most intolerable pain in the toes mentioned. They feel as though a rod of fire had been thrust into them. These pains come on her in the daytime when she is out walking. She is in such agony that she jambs her umbrella or parasol upon them. After getting home, taking off her shoes and stockings, and applying cold cloths, the pain is relieved.

Examination discovers no tenderness, swelling, or redness; no anæsthesia or hyperæsthesia, or any objective symptoms whatever.

The patient has normal urine and gives no gouty history. Nor is she relieved by anti-gout drugs, such as colchicum, iodides, and alkalies. Anodyne applications and rest helped her most.

Tarsalgia (*podalgia, policeman's disease*) is a neuralgic affection, due probably in most cases to an incipient flattening of the foot, and stretching of the plantar ligaments

[1] Described by San Marino in 1762 and called cheiropodynia; also observed by Nicoletti in 1806.

[1] Pedal pains occur in gout, rheumatism, syphilis, tabes, chronic alcoholism, and diabetes. The pains of latent gout, according to Anstie, are generally located in the dorsum of the foot. Those of chronic alcoholism have been observed to occur in the wrists and ankles. In syphilis a node can generally be discovered. A differential diagnosis is, therefore, quite possible.

Some have ascribed it to a deep-seated contusion of the adipose cushion covering the os calcis. Probably the condition varies somewhat in different cases. It is observed in persons who have been in the habit of going barefoot, and have then gone into the army or taken civil positions obliging them to stand or walk a great deal.

It occurs also in the policemen of Paris. Velpeau first observed it there in 1833, and gave it the name of the Policeman's disease. It has subsequently been described by other French writers, *e.g.*, Fabre, Desprès, and Gillette. The name tarsalgia was, I believe, given by Duchenne. Subsequently Gasselin, Lannelongue, and Le Fort have written about it. Only one case, so far as I know, has been described as Policeman's disease in this country, and that by Dr. T. B. Curtis, of Boston (vide *loc. cit.*). Dr. Curtis states that the policemen of Boston are not subject to it, and Dr. Morris N. Henry, of this city, kindly informs me that it has not been observed among New York policemen. This is due to the difference in the shoes and in the gait of American and Parisian guardians of the peace.

It appears to me that Dr. S. Weir Mitchell has described what is essentially this disease in the *Philadelphia Medical Times*, 1872, 1873, vol. iii., pp. 81, 113. At any rate, in tarsalgia, as in Mitchell's cases, there is not only pain in the heel and whole foot, but often contracture of the perineus longus, gastrocnemius, and plantar muscles.

If there is such a disease as the pododynia of Gross, Dr. Mitchell gives evidence to show that it is not confined to tailors, and that in some cases, at least, there is a low grade of arthritis of the small bones of the feet. Treatment, medical or surgical, seems to do little for the disorder, which is very chronic. Patients are better in cold weather, and when resting the feet.

Peculiar Neuralgic Affections.—A very peculiar vaso-motor and neuralgic affection of the hand was brought to my notice recently.

CASE IX.—Charles C——, married, aged fifty-five. Has been a strong healthy man; used tobacco but not alcohol; no specific disease. Is a stamper, and has to use the right hand and forefinger a good deal. In past three or four months has had a constant dull pain in the right forefinger extending to the wrist. Worse at night and in damp weather. Is steadily getting worse, and he begins to feel pain now in the thumb. This is so bad that he has had to give up work. There is no burning sensation. The finger is objectively cold, pale, flabby, and evidently has an impaired circulation. There is no anæsthesia or analgesia, and no hyperæsthesia. No motor trouble or weakness. One application of faradism relieved the pain instantly. He was then lost sight of.

The following is a case of a chronic neuralgia of the hand apparently hysterical in character.

CASE X.—Rebecca S——, aged thirty-four, New York. Parents healthy and had seventeen children. The patient is married and was well until she had her sixth and last child, a year and a half ago. She had been subjected to trouble and had worried a good deal. Is of a nervous temperament. After the last confinement she had puerperal mania for several months. She is now very nervous. Comes to complain of a painful finger which she has had for two years. The pain is in the outer side of the left middle finger, and runs up to the palm. There are no objective symptoms, no sensory or vaso-motor disturbances. The pain was intense, often preventing sleep.

SECRETORY ACRO-NEUROSES.—*Moist or dripping hands* are frequently observed in persons of nervous temperament, whether men or women. Sometimes the palmar hyperidrosis is so great as to be very annoying, and patients apply simply for relief of this symptom. I recall two cases of this kind. The patients were both women, and at about the menopause. They had no organic disease, but complained of various vaso-motor disturbances, such as disagreeable flushings of the face, "rush of blood to the head," sensations of fever, etc. The hands were continually moist and almost dripping with perspiration. A moist, dripping hand is often observed after nerve injury. Many persons suffer all their lives with a disagreeable palmar and plantar hyperidrosis. The latter is often combined with bad odor, due to decomposition of sweat. In some persons who suffer from this latter complaint the condition is congenital. If the trouble comes on in youth or adult life it is because of some causes that have produced a depressive nervous state. The remedies here are, therefore, general tonic measures and careful local treatment, with the use of antiseptics and astringents as described in dermatological text-books. Unless the trouble is excessive I do not find that patients will carry out a treatment very long. Hydrobromic acid comes as near a specific as anything. Strychnine, quinine, and atropine, with regular mercurial purges, should also be tried.

TWO CASES OF BRANCHIAL CYST.

By HENRY DWIGHT CHAPIN, A.M., M.D.,

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THE infrequency with which this variety of congenital tumor of the neck is seen, and the desirability of recognizing its nature, both as regards prognosis and treatment, have led me to write an account of the following two cases. In the early part of March there was brought to my clinic at the Out-door Department of Bellevue Hospital, a baby, five days old, having a tumor as large as an orange on the right side of the neck, the sterno-cleido-mastoid muscle crossing it at about its centre. The tumor was somewhat fluctuating and without pain, as the baby gave no signs of discomfort while it was being freely handled. The skin over the swelling had a natural appearance, and there was an entire absence of any inflammatory conditions. Having in mind the possibility of a congenital hernia of the lung, I first applied a stethoscope to the swelling, but could only hear the tracheal sounds transmitted rather indistinctly. An aneurism was likewise excluded by this examination, as there was an absence of pulsation and no bruit heard; it was likewise noted that pressure did not modify in any way the size of the tumor. At this age an aneurism would probably have been traumatic. An aspirating needle being introduced, some pale, straw-colored serous fluid was withdrawn, and the diagnosis made of congenital cyst.

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FIG. 1.

When the baby cried the cyst would grow tense, and the sterno-cleido-mastoid muscle, by contracting, divided it into two parts, which, however, had free communication, as pressure was readily transmitted from one to the other. The cyst was apparently unilocular. At birth the tumor was about the size of a walnut, but it had

since grown rapidly to attain the present size, and bade fair to do harm by pressure upon the food- and air-passages, as it was continuing to increase in bulk. As the parents could not give the baby the requisite attention at home, I placed it under the charge of Professor Stephen Smith in his wards at Bellevue Hospital. The object of treatment in these cases is, of course, to radically destroy the membrane that secretes the serous contents of the tumor. In structure the cyst consists of a thin capsule of connective tissue, lined on its inner surface by a matrix of epithelial cells, which must be destroyed by an inflammation set up in the sac, or removed by the knife, before recovery can take place. As these cysts are frequently connected with the sheath of the deep cervical vessels, complete removal by operation may be attended by alarming, if not fatal, hemorrhage. It is thus best to try the former method first. When the infant entered the hospital a silk seton was introduced into the cyst. Very little discomfort or disturbance followed, although the temperature rose temporarily to 101°. As there was a very scanty discharge and scarcely any inflammation induced by this seton, two more were introduced in a week's time. The temperature rose to 102° for a few hours, but soon subsided. The three setons now gradually caused a thickening of the sac by a low grade of inflammation, although there was no external redness and apparently not much pain following their use. They were left in place for about three weeks, when it was determined to evacuate the cyst, as, although growth had ceased, it was not diminishing in size. The setons were accordingly removed, an opening made into the cyst, and a large quantity of straw-colored fluid evacuated. The cyst was then distended with a solution of carbolic acid (1 in 100), and antiseptic dressings applied. When the dressings were removed in a few days, it was found that the sac was well contracted, and that there had been a very slight serous discharge. Other dressings were applied and changed from time to time during the next few weeks. The sac showed no tendency to refill, but continued to shrink up, until there is now nothing present but a lump of connective tissue, that will probably be still further absorbed.

FIG. 2.

It is often the experience of physicians that when a rare case of any kind is met, another of like nature is soon encountered. This, at least, has been my good fortune in the matter of branchial cysts. A boy, eight years of age, was recently brought to me by his mother, to discover the nature of a peculiar swelling about the size of a hen's egg, situated under the right side of the lower jaw, and extending to the upper part of the neck. The boy was healthy-looking, and had never had any serious illness. Two months ago his mother noticed a small swelling in the situation just noted, which appeared rather suddenly—at least, she observed it first one morning after the night's rest. She says it seemed about the size of the end of an egg, but I think there must have been a mistake in reference to its sudden inception, as a small and rather soft tumor could readily be overlooked in the soft tissues of the neck. At any rate, it grew rapidly, but without pain. There was no history of a blow, but as the boy was a restless, active little fellow, his mother thinks he could sustain a slight contusion or knock without particularly noticing it. When I examined him, a very free manipulation of the tumor caused no discomfort. It was evidently cystic, which was proven by removing some bloody-looking serum through a hypodermic needle.

FIG. 3.

In the case of this boy the fetal epiblastic tissue remaining from the imperfect closure of one of the branchial clefts had evidently continued in an embryonal condition until his eighth year, when, possibly from some irritation, proliferation took place, and a sac was formed lined with epithelial tissue. These cysts may thus appear in after life, if the epithelial elements resulting from defective development are present, as the latter do not necessarily become active before or immediately after birth. I placed a silk seton in the middle of the cyst, which raised such an active inflammation as to necessitate its removal in three days. The irritation involved in this procedure proved sufficient, as the cyst grew smaller, and finally completely disappeared. There is now nothing left to mark its site but a small, hard lump that can be better felt than seen.

A glance at some of the facts of embryology, as developed by Cusset and others, will assist in a correct understanding of these branchial cysts.

Early in the fetal life of the vertebrata there appears under the projecting frontal process a series of four plates, bounding the cavity of the pharynx on the side. These plates unite to form four parallel arches separated by transverse clefts. The branchial clefts unite, and by a process of morphological change form various structures of the neck. If this regular process of development is interfered with from any cause, various abnormalities may result, as a condition intended to be merely temporary remains more or less permanent. Hence, according to the various grades of arrested development we may have marked deformities, branchial cysts, or the remains of fetal epithelial tissue, destined to proliferate at a later day and form a cyst. There likewise may result fistulous tracts from non-union of the branchial clefts, particularly from the lowest one. These have been divided into (*a*)

complete branchial fistulæ, open the whole length of the tract; (*b*) fistulæ having only an external orifice and ending in a cul-de-sac, which is the commonest form; (*c*) fistulæ with only an internal orifice.

More frequently the branchial tract is closed at both the pharyngeal and cutaneous ends, and a cyst is formed between. Branchial cysts, although rare, are hence more frequently met than fistulæ. In an excellent and exhaustive paper on "Branchial Cysts of the Neck," read before the American Medical Association at its meeting in 1884, by Dr. N. Senn, of Milwaukee, the following classification is made according to the cystic contents:

"1. Mucous branchial cysts, due to imperfect closure of the upper portion of the branchial tract with retention of its physiological secretion. 2. Atheromatous branchial cysts, usually located in the second and third branchial tracts in the region of the hyoid bone. 3. Serous branchial cysts, having a thin-walled capsule lined with pavement epithelium, and following the defective obliteration of any of the branchial clefts. 4. Hæmato-cysts of branchial clefts, in which the serous fluid of the cyst has been discolored by hemorrhages into the sac."

The second case mentioned in this paper is of the latter variety. While the contents of these cysts vary according to the branchial tract from which they are developed, yet they are always such as may be produced by some kind of epithelium, as only this variety of tissue is present at the time of closure of the branchial clefts. In this they differ from true dermoid cysts, that contain the secretion of the various glands and appendages of the skin. A simple serous cyst, developed in the connective tissue of the neck, independently of a branchial origin, will not have the lining of epithelial tissue. It was after a microscopical examination that I became satisfied of the branchial source of the boy's cyst. The photographs of the baby were made by Mr. Mason, of Bellevue Hospital.

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ABSCESS OF THE TONGUE; WITH REPORT OF A CASE.[1]

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The tongue is essentially a muscular organ with a rich vascular supply. Its medullary portion is made up of fibres of the palato-glossus, stylo-glossus, and genio-glossus muscles. Its arteries are derived from the lingual branch of the external carotid. The hypoglossal is the motor nerve of the whole tongue. The anterior portion of the tongue, lying in front of the circumvallate papillæ, has its sensory supply from the lingual branch of the inferior maxillary nerve, accompanied by filaments of the chorda tympani; its posterior third receives the glosso-pharyngeal nerve. The latter region is furnished with numerous glands and is much more lax in structure. Its remarkable immunity from phlegmonous inflammation is, no doubt, explained by the scarcity of cellular tissue in the composition of the tongue.

That abscess of the tongue is a rare affection is in a measure indicated by the absence of reported cases from surgical literature. Fairlie Clarke, whose work on diseases of the tongue is perhaps the leading authority, mentioned but three cases reported by various observers. Gross and Agnew agree in the opinion that the structure of the organ is unfavorable to suppuration, even when an extreme degree of inflammation exists. In Holmes' "System of Surgery," Coote gives the history of a single case, and mentions having seen several others. Erichsen states that the disease, though rare, occasionally occurs, and that he has seen several cases. In Cohen's valuable article on "Diseases of the Mouth and Tongue," in Pepper's "System of Medicine," the observation is made that parenchymatous glossitis is a comparatively infrequent disease at the present time, but numerous ancient writers are referred to as having described it. Bryant details six cases of inflammation and suppuration of the tongue in a paper entitled "The Surgical Affections of the Tongue" ("Guy's Hosp. Rep.," vol. xi., 1883, p. 110), and remarks that, excluding cases resulting from mercurial salivation, the disease is uncommon.

The affection is interesting from a diagnostic standpoint, and important from the fact that it may actually involve danger to life. The nature of a case of lingual abscess may be sufficiently clear, when the symptoms comprise febrile reaction, accompanied by rigors, localized swellings, throbbing pain and fluctuation. In the absence of several of these symptoms, as in the case to be related at the conclusion of this paper, the diagnosis is by no means certain. The presence of an abscess in the parenchyma of the tongue may easily be overlooked, or, acute symptoms being absent, it may be regarded as a lingual tumor of a more serious character. The difficulty of diagnosis is well illustrated in a case referred to by Vogel in "Ziemssen's Encyclopædia" (vol. vi., p. 750). He says that Wutzer mistook an abscess of several weeks' duration for scirrhus, and recommended extirpation. The first incision exposed the error. In a contribution to the London *Practitioner* (1881, xxvii., p. 266), Stephen Mackenzie includes among the conditions liable to be mistaken for glossitis, salivary calculus, of which the notes of two cases are given, acute ranula, of which also two cases are narrated, and herpes of the tongue. Of the last-mentioned rare disease he reports only one case, which was at first regarded as an idiopathic glossitis. A simple cyst of the tongue has on two occasions been opened under the supposition that it was an abscess ("Nouv. Dict. de Méd. et Chir. Prat.," vol. xx., p. 144). The latter condition may even be mistaken for a gummy tumor, especially in the case of an abscess developing slowly and without systemic disturbance. It must be admitted, therefore, that a positive diagnosis is difficult and may be impossible. In some cases an explorative puncture may be required in order to determine the condition.

An inflamed tongue may become so swollen as to cause alarming and even serious dyspnœa, either by pushing up the velum palati, or, less probably, by pressing down the epiglottis. Glossitis is included by Cohen ("Diseases of the Throat and Nasal Passages") in a list of diseases possibly indicating tracheotomy, and in at least one case on record, death may be referred to abstention from surgical interference. In the London *Lancet* (January 6, 1885, p. 10), J. Z. Laurence reports a case resulting fatally through the obstinacy of the patient's friends in opposing scarification and, later, tracheotomy. The disease occurred in a female in the course of an attack of acute rheumatism. At the autopsy the tongue was found swollen, soft, and infiltrated with sero-pus. An interesting point in the case was "the successive and separate invasion of the two halves of the tongue by the inflammatory action." The left side was first involved, relief being obtained by incision and the evacuation of about half a pint of blood. On the following morning the right half was affected, and further operative interference was denied. It is interesting to notice that the possible necessity of opening the trachea has long been appreciated, although modern views of the risks of the operation itself have undergone decided modification. In the article on glossitis in the "Dict. des Sci. Méd." (1817, p. 494), deep incisions, leeching, and other antiphlogistic measures are recommended, and if the tumefaction of the tongue reaches a degree to cause serious dyspnœa, laryngotomy, "no doubt perilous," is suggested as a last resort.

Dysphagia, as well as dyspnœa, is apt to be an important symptom. Even before the swelling has reached an extreme degree, impediment to the movements of the tongue and pain on attempts at deglutition are decided obstacles to the ingestion of food, and the nutrition of

[1] Presented to the American Laryngological Association and accepted as a candidate's thesis.

the patient is likely to suffer. In a fatal case reported by Ranking and cited by Clarke, the patient died in collapse and "a gangrenous abscess, the size of a turkey's egg, was found occupying the situation of the genio-hyoglossi muscles and the substance of the tongue as far back as the epiglottis," its cavity containing a barley beard, which the patient had placed in his mouth a week previous.

The etiology of lingual abscess is obscure. It is possible that prolonged exposure to wet and cold (Bamberger), in a person of debilitated health, may be sufficient to excite inflammation of the tongue. At least, in non-suppurative glossitis, called by Salter *erectile*, no other cause may be discoverable. On the other hand, a few of the recorded cases of abscess of the tongue are distinctly referrible to traumatism. The idea that simple exposure may be a direct cause of glossitis is opposed by Th. Sidlo, who reports seven cases in the *Allg. Wiener Med. Zeitung* (1879, 8, 9, and 10). He admits that inflammation in the soft parts of the sublingual and submaxillary regions may be excited by chilling of the surface of the body, the process thence extending to the tongue itself. In six of the cases recorded by this observer the whole tongue was affected; in one, only the right margin. In six cases the attack occurred during cold weather, and in four after exposure. The patients were all males and their ages ranged from twenty to forty-four years. An ingenious theory of the etiology of inflammation limited to one-half of the tongue has been suggested by Gueneau de Mussy (*Arch. Gén. de Méd.*, 1879, cxiii., 385), who reports two cases of hemiglossitis. He considers it to be of nervous origin and consecutive to irritation of the chorda tympani. His view is based on the experiments of Vulpian (*Rev. des Sci. Méd.*, 1873, 476; also *Gaz. Méd.*, 1873, 4 to 8), who demonstrated that congestion and swelling of the tongue may be produced by galvanization of the lingual nerve, whereas these phenomena are absent in case of preliminary section of the chorda tympani before its union with the lingual. Gueneau de Mussy prefaces the announcement of his theory by remarking that the nervous supplies to the two halves of the tongue are entirely distinct, while numerous anastomoses occur between the arterial branches of either half, and even the muscular fibres interlace between the two sides. He also claims to find a confirmation of his theory in the occurrence of pain in the ear and side of the head corresponding with the side of the tongue affected. Moreover, the nocturnal exacerbation of pain, with lingual hyperæsthesia persisting through the painless interval, the occurrence of herpetic eruption upon the lips and face, circumscribed erosions of the mucous membrane of the tongue at various points, and, finally, stimulation of the salivary glands, all of which symptoms were noted in the two cases reported by this observer, are thought to support his view of the pathogeny of hemiglossitis. It appears, however, that the structural independence of the two sides of the tongue relates to the blood-vessels almost as definitely as to the nervous distribution. A dense fibrous septum divides the tongue through its middle, and the only points of communication between the arteries are diminutive in size and two in number—one near the tip of the organ and the other in the region of the circumvallate papillæ (Hyrtl). A striking demonstration of this fact has recently occurred in a case of excision of a large part of the right half of the tongue for epithelioma, in which I did a preliminary ligation of the right lingual artery. Hemorrhage from the tongue was comparatively slight and ceased spontaneously, with the exception of a single point near the tip, which was tied, although the ligature did not seem to me to be positively required.

In Allen's "Anatomy" (sect. vi., 626) the statement is found that unilateral glossitis may occur owing to this arrangement of the arteries. So far as anatomical structure affects this theory it may, therefore, be assumed that hemiglossitis is not necessarily neuropathic. Thibierge, who reports a case of right hemiglossitis (*France Méd.* 1882, p. 14), believes the theory untenable. His case occurred in a female, twenty-three years of age, without known cause. The constitutional reaction was exceptionally violent, and several exacerbations or relapses of inflammation occurred before final recovery. Relief was given and suppuration possibly averted by vigorous leeching of the submaxillary region. The result of this method of treatment is looked upon as an argument against the theory of Gueneau de Mussy, on the ground that abstraction of blood from so remote a point would hardly be likely to influence a neurosis of the chorda tympani. It is also noted that in affections of the tongue recognized as primary, especially cancer, aural pain is very pronounced, and is manifestly due to compression caused by the neoplasm or infiltration. In an interesting article on hemiglossitis in the *Liverpool Med.-Chir. Journal* (July, 1883, p. 195), Dyce Duckworth expresses the opinion that this lesion is a "catarrhal neurosis," reflex in character, and not the direct result of exposure, which is merely an exciting cause. In reviewing the nervous physiology of the tongue he calls attention to the fact that both the glosso-pharyngeal and the lingual nerves contain vaso-dilator filaments, those of the latter being derived from the chorda tympani. Vaso-constrictor filaments are found in the lingual nerve itself and in the hypo-glossal nerve. Division of the lingual nerve, before its junction with the chorda, and irritation of its peripheral extremity are followed by contraction, whereas vascular dilatation follows division and irritation of the lingual nerve after it has been joined by the chorda. This author considers the evidence as to the limitation of the morbid process to one nerve not conclusive, but he inclines to a belief in the "involvement of the fifth and chorda tympani branches, or of the glosso-pharyngeal, rather than to that of the hypoglossal." As to exposure as an exciting cause of hemiglossitis, he refers to Hutchinson's idea of the distinction between erysipelatous and catarrhal inflammations in general—in the former the influence of cold may be direct, while in the latter, as in the case of the tongue, it is indirect, and the consequent inflammation is reflex, "the part inflamed not being the part actually chilled, but one in relation with it" (*Med. Times and Gaz.*, January 6, 1883, p. 4). However plausible this theory may seem it needs to be substantiated by fuller and more exact clinical observations.

The treatment of abscess of the tongue, when the condition is well defined, must be perfectly clear. In the formative period, leeching and the use of ice and emollient gargles seem to be capable of aborting the disease. In the event of excessive tumefaction or of suppuration, free incisions on the dorsum of the tongue are demanded. With regard to the danger of this last resource, nearly all the evidence is in the negative. Notwithstanding the extreme vascularity of the tongue, especially in its inflamed state, dangerous hemorrhage seems never to have occurred.

A single case, reported by William Pratt (London *Lancet*, March 11, 1882, p. 389), is of interest in this connection. His patient was a man, fifty-eight years of age. Free scarification was practised for relief of the swelling, and on the following day an abscess opened spontaneously on the under surface of the tongue over the track of the ranine artery. The next day free venous hemorrhage took place into the cavity of the abscess and continued for several hours. It was at length controlled by means of a pledget of lint soaked in perchloride of iron. At the expiration of a fortnight no trace of the abscess remained, except slight induration at its site.

Deep incisions of the tongue not only seem to be devoid of risk, but they undergo repair very quickly, and leave little or no deformity. Still, the use of the knife may be regarded as a last resort, only justified in the presence of a positive diagnosis or of urgent dyspnœa.

In a large proportion of published cases recovery has followed spontaneous rupture, as in those reported by J. H. Pooley (*American Journal of the Medical Sciences*, April, 1872, p. 385) and by Robert Annan (*Medical*

Times and Gazette, October 16, 1852, p. 387). In the former case, a tumor the size of a pigeon's egg was situated at about the middle of the left side of the tongue. It was distinctly circumscribed, denuded of epithelium, slightly sensitive, and gave an obscure feeling of fluctuation. Puncture was proposed but was declined, and the abscess ruptured on the fourth day. In the case reported by Annan, rupture occurred on the fourth day, nine or ten hours after scarification had been resorted to in order to prevent suffocation. The rapidity with which pus formed in this case is rather remarkable, although it may have been present at the time of the incision, the point of the knife, perhaps, not penetrating to sufficient depth. Annan also mentions four other cases of glossitis in his experience, in two of which suppuration occurred. Usually the tongue quickly resumes its normal dimensions after evacuation of the abscess. That this is not always so is shown by the case of Williamson (London *Lancet*, January 22, 1881, p. 136), in which spontaneous opening of the abscess occurred after symptoms had lasted for one week. The tongue remained very much enlarged and protruded from the mouth. The condition seems to have been aggravated by impact of the organ upon the teeth of the lower jaw, and was only relieved by the use of a shield and support made of gutta-percha.

The following case of abscess of the tongue is the only one that has come under my own observation during several years of service at the New York Eye and Ear Infirmary and at the Manhattan Eye and Ear Hospital. Its special interest lay in the marked disproportion between the general and local symptoms, and in the speedy and favorable termination. The patient was a man twenty-two years of age, engaged in a large establishment for making ice-cream. He was somewhat irregular in his habits, but of good constitution, and gave no history of struma or syphilis. He had never had rheumatism, a skin eruption, or other disease. His history was given with difficulty on account of pain caused by attempts to articulate. One week previous he began to have "sore throat," and in the course of two or three days his tongue became so stiff and swollen that he was unable to swallow even liquid food. There were no chills nor fever. On the fourth day swelling and pain on pressure were noticed externally beneath the jaw on the right side, also frequent twinges of acute pain darting toward the right ear. Flaxseed poultices and alum-water gargles were used without benefit. At the end of a week, when first seen by me, there were swelling and sensitiveness in both submaxillary regions, more especially the right. The tongue, except its very tip, was excessively swollen, and its dorsum was covered by a thick yellowish-white fur resembling wet chamois skin. The papillæ were invisible, the surface of the tongue being perfectly smooth. The tip and what could be seen of the under surface were unnaturally red. The leathery fur was quite soft and moist, and there seemed to be an excessive secretion of saliva—at least the patient was unable to dispose of it by swallowing, and it rapidly accumulated in the mouth. Speech was painful and the voice was thick; protrusion of the tongue was impossible. A partial view of the pharynx and left tonsil showed them to be normal. The faucial space was nearly filled by a diffuse swelling of the right side of the tongue, the left side being apparently unaffected. The finger introduced into the mouth discovered the most sensitive region at the base, on the right side and just within reach, but no circumscribed tumor could be defined. Fluctuation was not recognized by palpation internally or externally. The pulse was somewhat accelerated; temperature was normal. The patient was pale and weak from lack of food, not having been able to eat anything for several days. Scarification was suggested, but was objected to, and, accordingly, a calomel purge, warm gargles of borax and chlorate of potash, and warm fomentations externally were ordered. On the following morning a very decided change was apparent. The tongue had nearly returned to its normal size and appearance. The patient stated that improvement began the previous evening with the discharge of a small quantity of matter from the mouth. For the first time in eight days he was able to eat soon after this occurrence. Pain ceased almost immediately and there was much less difficulty in speaking. With a laryngeal mirror a small opening, barely admitting the point of a probe, could be seen at the base of the tongue on the right side. The probe being bent, its curved extremity could be passed into this opening to the depth of nearly half an inch. The margins of the aperture were thick and everted, somewhat resembling an enlarged circumvallate papilla, in the region of which it was situated. On withdrawal of the probe a minute drop of pus exuded. The patient was not again seen after this examination, in which Dr. Asch joined me, and it is natural to suppose that he had no further trouble.

In looking for the cause of the inflammation in this case both traumatism and exposure were found to be concerned. In the course of his occupation the patient was subject to considerable variations of temperature, but he was not conscious of having "caught cold," or of having been ill in any respect for many years. About ten days before the first symptoms developed he was "on a spree" for several days, and may at that time have laid the foundation of his trouble. He also recalled the fact that, at about the same time, while drinking water from a cup, he swallowed a small piece of straw. A fragment not more than three-fourths of an inch long caught in his throat, and he was obliged to dislodge it by using his finger. There was no soreness, pain, nor bleeding, and nothing to indicate that the tongue had been wounded. Still, it is quite possible that a small bit of straw buried itself in the tongue to become the focus of inflammation. As regards this case, it is safe to exclude the neurotic theory of etiology. Many of the symptoms characteristic of a neurosis were absent, and the pain in the ear and side of the head did not present itself until several days after the establishment of inflammatory symptoms.

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A NEW OXYTOCIC.

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Without any lengthy exordium I will commence my subject by saying that I have discovered an oxytocic which to me is a new and original idea—not having read or heard lectures about it even. It consists simply of heat applied externally. I will briefly narrate a few cases to describe its potency.

I was called to a case of labor, a multipara, five miles in the country, just as daylight had faded. I found the patient walking around in the room, having irregular, short, teasing pains. I had her lie down, and I made the usual digital examination, finding the os quite patulous, with a vertex presentation and a dilatation about the size of a silver half dollar. I folded my arms and waited for several hours, the patient continuing to have the same teasing, irregular pains. I again made an examination to find the smallest possible progress, but there was almost a complete inertia. Getting impatient, and having delivered her twice before, I knew the adaptability of the parts for the required task, and being satisfied there was no *vis a fronte* to antagonize a dose of ergot, I gave it, using a reliable tincture. After a proper interval I repeated the dose, and kept repeating until I had given one ounce, when finding the uterus did not respond, I had the patient walk around the room. Then I kneaded the womb well, and still getting no result I gave ten grains of quinine with a better result from that than anything I had done or given; it roused the uterus to a pretty energetic action for about thirty minutes, then ceased. I then gave a stimulating toddy, but

all to no purpose, and daylight having arrived I hastened home.

In a few hours a messenger came for me in haste to see my patient again. I returned hurriedly only to find the patient plodding along at the same old pace without progressing one jot. Having increased my supply of ergot, I gave another ounce at two doses, but to no purpose. Finally I resolved to go again, but before going I thought of hot mush poultices, and decided to try them awhile to fill up time. I had them prepared nice and stiff, and had them applied over the fundus of the womb as hot as they could be borne, replacing them as soon as one became a little cool. To my great satisfaction, before the third poultice had been applied the pains began to come in full force and regularly, and in two hours after the pains started up, the labor had ended with a fine ten-pound boy. I kept the poultices up until the expulsion of the child.

Second case—a primipara with convulsions; had four before I saw her. Three miles from town; found labor just started with a vertex presentation. I gave chloral abundantly, bled her tolerably freely, gave twenty drops of veratrum at intervals, used chloroform inhalations, and still the convulsions would come with the labor progressing only at the minimum rate. It was impossible to use the forceps, and everything being so rigid, close, and compact I could not introduce my hand to turn, so I resolved to hurry nature with my hot poultices, and with my chloroform I stood at the patient's head and had the poultices applied fast and hot. In less that three hours after commencing the poultices, labor was over, with a long-headed, living, fine boy, and no laceration to the mother. She continued to have convulsions for ten hours afterward; then they ceased and she made a rapid recovery.

Third case—a multipara. I was called out before daylight, found labor barely commenced, but the patient reported as having been worried all night with short, teasing, irregular pains. I waited a few hours with no progress and the same character of pains. About four hours after my arrival the patient inquired what was the matter with her eyes; said she could not see me nor anyone else in the room. I told her I would remedy that, and gave her a large dose of chloral hydrate. In less than five minutes after taking it she had a light convulsion. I waited half an hour for the effects of the chloral, and then commenced with hot poultices. In four hours I started for home, leaving the mother and child doing well.

Fourth case—a primipara with convulsions. I was called to see her with another physician and requested to bring my forceps and plenty of chloroform. I found a case of puerperal convulsions, having been in labor some five hours, convulsions having commenced in the latter two. The physician had bled her profusely, but it did not have the desired effect of checking the convulsions. The labor had progressed smartly, but after the convulsions set in there was almost a complete inertia—entirely so, so far as the progress was concerned, although she would have short, irregular pains. I advised my hot poultices for awhile rather than any instrumental interference, which advice was acquiesced in and the poultices were applied. They were given without any obvious effect for some time, and I had began to get a little dubious about my hot poultices "at all times and under all circumstances," until I discovered that they were placed near the pubes instead of over the fundus of the womb, and also that they were not hot enough. After correcting the error by putting the poultice higher and having them hotter, good steady pains commenced, and the labor was ended in less than two hours with a still-born babe.

As the cases are somewhat scarce for assistance as detailed above, and my obstetrical practice not being extensive, and being anxious to test the certain utility of my "new idea," I write this to ask the profession to give it a trial and report, since, if it is what I think it is, it is certainly pre-eminently above all the oxytocics for safety and simplicity, as the case can be hastened or slowed at option by simply putting on or withholding the hot applications. I do not mean warm, but hot as can be borne.

THE ETIOLOGY OF THE PLYMOUTH EPIDEMIC.

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Since the appearance of my former article upon this subject, which was contained in the issue of the New York Medical Record of June 6th, the press has been filled with communications attacking the position which I assumed and contradicting the statements which I made. It is proper to state that this opposition has been exclusively from the *authors* and *instigators* of the "mountain-stream theory." The facts contained in the previous article were obtained mainly (although not entirely) from the investigations of Dr. Taylor and others, which were embodied in a report made at the instigation of the Plymouth Water Company, and read before a meeting of the Luzerne County Medical Society. That article was intended simply as the expression of my dissent from Dr. Taylor's deductions from admitted facts. The bitterness of the opposition to my theory has compelled me, in self-defence, to make further investigation on my own account, in order that I might avoid the danger of arguing upon erroneous data. This investigation has been carefully prosecuted at the best original sources, and at every step it has tended to confirm the conviction that the "mountain-stream theory" is both inadequate and misleading.

My endeavor will now be to show *conclusively* that the epidemic in question was *not* the result *solely* of the contamination of the reservoir-water through the typhoid dejecta of the single patient who was confined in a house situated upon the bank of the mountain stream between the third and fourth reservoir, but was due to several concurrent causes, prime among which was the drinking of contaminated river-water.

So much has already been written upon the topography of Plymouth and its vicinity as to make the subject appear almost trite, but I shall be obliged to beg the reader to bear with me while I review as briefly as possible the locality and the existing sanitary condition.

The town of Plymouth is situated upon the right bank of the Susquehanna River, three miles below Wilkesbarre, and two miles below Pittston. The points of interest bearing directly upon this epidemic are, namely, the water-supply and the sanitary condition of the town. The water-supply, as obtained through the medium of the Plymouth Water Company, is from two sources. First, from four successive reservoirs, which are situated upon the mountain-side and fed by a mountain stream. The water thus obtained is distributed to the street mains from the lower of the four reservoirs, and delivered to the inhabitants by means of hydrants. Second, from the Susquehanna River. This source is only resorted to when water is not obtainable from the mountain.

In this case it is pumped directly into the street mains from a pumping station belonging to the Plymouth Water Company, situated upon the bank of the river at a point very closely corresponding to the centre of the town. There is still another system of waterworks located in the upper end of Plymouth, which are controlled by the Delaware and Hudson Canal Company, and serve the purpose of supplying their coal-breakers.

This system has two sources of supply. First, from a reservoir upon the mountain-side, which is filled by a mountain stream and springs. Second, by a reservoir filled by means of water pumped from the Susquehanna River; main and branch pipes carrying the water from each reservoir to the "breakers." The latter source is

only resorted to when the former is insufficient to meet the demand. It is to be noticed that No. 1 reservoir, supplied by mountain, and No. 2 reservoir, supplied by water pumped from the river, communicate by means of the various pipe-lines. The pipes leading from No. 2 reservoir are supplied with valves, so that the supply can be effectually shut off from any "breaker" by simply closing the valve. River-water was pumped for the purpose of supplying these breakers during the entire winter, and the pumps were not abandoned until April 4th or 5th last. At the northern end of Plymouth is situated a hollow, called Whitewash Hollow, within which are located No. 2 and No. 3 "breakers." The drainage of this little valley is received by a creek, termed the Whitewash Hollow Creek, which, receiving the mine-wash from the above-named breakers, empties into the Susquehanna at the extreme north end of Plymouth.

A little below, and running in a northwesterly direction, is another hollow, termed "Polk Hollow." This contains No. 4 and No. 5 "breaker," and a creek, called Polk Hollow Creek, which receives the overflow from No. 1. reservoir of the Delaware and Hudson Canal Company. This creek receives the mine-wash from the latter breakers, and empties into the Susquehanna at a point some distance below the pumping station of the Plymouth Water Company.

I have given these details because they have an important bearing upon the subject we are about to discuss. The sanitary condition of the town is deplorable. It is filthy beyond description. There is indeed a system of drainage there, but the receptacle to a great extent is the town itself. It is a frequent sight to see a three or four inch drain-pipe emptying its contents into the street directly in front of a house which it is supposed to drain. This drain-water forms pools in the streets, and in some localities emits a stench which is next to unbearable. The locality is beyond dispute a malarial district, and the results of malarial infection are constantly present.

Before proceeding to the discussion of the various factors present in the production and continuance of this epidemic, it seems to me admissible to introduce a few aphorisms relating to the etiology of typhoid fever.

1. That there *is* a specific element necessary for the production of typhoid fever.

2. That the character of this specific poison is at present *unknown*.

3. That the specific element in the production of the disease can arise spontaneously has never been satisfactorily demonstrated.

4. That the specific element is contained in the excreta of an individual affected with the disease.

5. That the poison is not capable of reproducing the disease immediately upon its elimination.

6. That a period of decomposition is required outside the body before the specific poison assumes an *active* state.[1]

7. That the specific poison is not capable of reproducing the disease immediately upon its reception by the individual; but must pass through a period of incubation before the specific results are attained.

8. That there are (at least) two ways in which the poison may gain access to the system, viz., through the water that we drink and through the air[2] which we breathe.

The weight of authority is agreed upon these points, and I believe that my readers, with few exceptions, will concur with them.

After re-stating that the facts bearing upon the Plymouth epidemic, and the concomitant facts relating to the pollution of the water of the Susquehanna River at points above Plymouth, show *conclusively* that the drinking of this contaminated water was the causative agent productive of the first cases of the disease, it will be my endeavor to present these *facts* and make the deductions which they allow.

As has been many times stated, water was pumped from the Susquehanna River directly into the street mains, and used for drinking purposes by the inhabitants, from March 20th to March 26th inclusive. The first case of the disease appeared upon April 19th; new cases were constantly appearing until April 15th to April 18th, after which time there was a very large increase.

That the river-water was polluted with the sewage from the towns situated upon the banks of the river above Plymouth is a fact conceded by all; and that this water contained the specific element of the disease, is a fact denied by many, but conclusively demonstrated by the following statements: The physicians of Pittston, in answer to a circular, send me reports of 256 cases of typhoid fever which occurred between August 1, 1884, and April 1, 1885. We stated in our previous article that disinfection was improperly carried out at Pittston, the disinfectant used being the sulphate of iron, which has recently been shown by the New York Board of Health to be inefficient, and that typhoid stools treated by it are not rendered inocuous.

As previously stated, the sewage of Pittston empties directly into the Susquehanna River. The poison contained in the excrements from these patients, upon being thrown into the sewers, passed through its period of decomposition, and was continually discharged into the Susquehanna River in its *active* state until that river became frozen.

The physicians of Pittston, in reply to my question as to whether there had ever been an epidemic of the disease there, state that this condition existed last fall. This certainly accounts for the peculiar virulency of the river-water at the time when it was used for drinking purposes by the inhabitants of Plymouth.

There were a number of cases of typhoid fever in Wilkesbarre between the dates above mentioned, but, according to the statements of the physicians of the town, only a few of them were so situated that the excreta of the persons affected with the disease could gain direct access to the Susquehanna River.

Typhoid fever has been endemic in Plymouth for the past four or five years, and every time the river-water has been resorted to for drinking purposes there has been an increased prevalency of the disease. To demonstrate this, I will cite the following facts, for which I am indebted to my friend Dr. G. W. McKee, of that place. In 1882 river-water was pumped into the mains from October until January 1st, and it is a noteworthy fact that cases of the same type of fever which is now prevailing increased in number, and continued until some time after the pumping ceased. In 1883 river-water was pumped from the last of September to the 1st of February. During this time the same results were noticeable—the fever cases increased in number and virulency of type, followed by many deaths.

Again in 1884 the river-water was pumped from the latter part of July to the 24th of November. The same results were again noticeable. Finally, in the present year, from March 20th to March 26th inclusive, river-water was again resorted to, and following this pumping appeared the epidemic which is the subject of our discussion.

The people of Plymouth have an antipathy toward the using of river water for drinking purposes. This has been brought about by the results following the using of water obtained from that source in preceding years.

A short time since the citizens of Plymouth arose *en masse* and stated to the water company that under *no* circumstances would they hereafter accept of water obtained from the Susquehanna River, and that a non-compliance with this injunction would occasion such action as would result in the forfeiture of their charter.

I have now established four important facts.

[1] Loomis: Lectures on Fevers, p. 23.

[2] Murchison, p. 443. Liebermeister: Ziemssen's Cyclopædia, p. 56. Ibid. Quotes V. Giette (Ziemssen's Cyclopædia, p. 56). Loomis: Lectures on Fevers, p. 24.

First.—That the river-water was contaminated by the specific element of typhoid fever in its *active* state.

Second.—That this contaminated water was supplied to the inhabitants of Plymouth at a time preceding the appearance of the epidemic.

Third.—That the use of river-water at other times has been followed by similar results.

Fourth.—That the common sentiment of the community condemns the water obtained from this source.

To assert in the face of these facts that the river-water was not even a factor in the production of the epidemic seems the height of presumption, to be accounted for only by the prejudice or self-interest of the investigators.

Such an assertion could not be made or maintained for a moment without the suppression or misstatement of important facts, or the deduction of wrong conclusions from facts correctly stated.

I now proceed to show in what particulars all this has been done by the "mountain-stream theorists."

I quote the following from the report upon the Plymouth epidemic by Drs. Shakespeare and French, of Philadelphia:

"March 20th of this year, at 5 o'clock, P.M., water from the Susquehanna was pumped directly into the main of the lower street, and this was continued without interruption until March 26th, at 5 P.M. During this period the river-water was unusually befouled by the sewage of Wilkesbarre, the water in the river being lower than for years, and its surface frozen tight.

"It was believed that none of the Susquehanna water reached the main which supplies Back Street on the hillside, for all connections between it and the main on the lower or Main Street had been cut off, except at the point, already mentioned, high up in the town, where the large pipe, descending from the reservoir, divides into the upper and lower mains. This belief was based upon the fact that when all the coal companies are drawing water the force of the engines of the water company is not sufficient to raise the water to the level of that branch. The water distributed from the Back Street or upper main was believed to be at that time exclusively mountain water. But we found, however, that water from the Susquehanna had not only reached the level above-named, but had actually been forced back into the reservoir, the level of its water having been raised three feet during two days of the pumping. This information is from the superintendent of the water company. He says that the small amount coming into the reservoir at this time from the mountain could not possibly account for the increase."

It will be seen from this that the distributing reservoir of the Plymouth Water Company was also contaminated with river-water below, as well as by the typhoid dejecta of the patient upon the bank of the mountain stream above.

The advocates of the "mountain-stream theory" further claim that there were several communities supplied exclusively with river-water, which communities obtained immunity from the disease.

Again quoting from the report of Drs. Shakespeare and French, they state:

"The population of Welsh Hill, be it noted, are not furnished with water by the water company of Plymouth, and therefore do not drink the 'mountain water' when they are at home. Their constant water supply, the year round, is principally Susquehanna water. There are, however, a great number of wells. The river-water is forced up by the powerful pumps of the Delaware and Hudson Coal Company, around whose 'breaker' this village or suburb is built.

"We found, first, that during the period of pumping, some of the Susquehanna water had reached the lower reservoir, as already stated, and had consequently not only reached all portions of the town supplied by the water company's pipes, but had also reached those people in the little fever-stricken dwelling located on the bank of the stream below the lower reservoir, who drew their water exclusively and directly from the brook. This fact of course complicated the question of the source of pollution of the drinking-water, although it still seemed probable that it was located along the mountain stream, for it was found that most of the sick had used water which was least contaminated by the Susquehanna. We found, second, that the people on Welsh Hill did not use any of the mountain water, but on the contrary got their hydrant-water directly from the Susquehanna at a point in the river *a half-mile nearer the sewers* of Wilkesbarre. In that part of Plymouth there is a population of eight hundred. Dr. Thomas Biddle, of this city, sends us the following facts: 'There is a total of nine ill of the fever. Five of these used water, while at work or at school, from the pipes of the water company in other parts of the town. Two of the remaining cases used well-water, and are recent cases, in all probability infected from those first ill.'

"This freedom from sickness at Welsh Hill clears up the doubt caused by the entrance of Susquehanna water into the reservoir."

Drs. Shakespeare and French have been misinformed regarding this matter, for the *facts* are simply these, that the community upon Welsh Hill are not, neither have they been, supplied with river-water at any time. There is not a hydrant upon Welsh Hill, and the only supply which these people receive from *any* system of waterworks whatever is through the medium of a pipe constantly furnishing a small stream of water, which runs into an old cask situated at some distance up Polk Hollow, from Polk Hollow Creek, which receives the overflow from No. 1. reservoir of the Delaware and Hudson Canal Company. This reservoir, as previously stated, is supplied by a mountain stream and springs.

Furthermore, the people in this community, according to their own statements, drink well-water exclusively. The erroneous statement of Drs. Shakespeare and French forms the corner-stone upon which they base their conclusions, and eliminates the possibility of infection from river-water.

The two other communities which it is claimed had immunity from the disease are, namely, Ridge Row and Broadway.

I quote from an article by Dr. L. H. Taylor, of Wilkesbarre, which was contained in the *Philadelphia Medical News* of June 20th:

"Is there anything further needed to convince the most sceptical that the Plymouth epidemic was not caused by using river-water? If so, here it is. In pursuing our investigation, we found at Ridge Row a community of twenty families living in ten double houses, and at Broadway a community of forty families in twenty double houses. These two places are in the upper end of Plymouth, and are entirely free from the fever. But all through the fall and winter, and even through the fatal month of March, they were supplied with water by the Delaware and Hudson Company, pumped directly from the deadly (?) Susquehanna, sixty feet from shore, and half a mile nearer to the Wilkesbarre sewers than the point at which the pipes of the Plymouth Water Company enter the river. It is proper to state that at Broadway there are two wells, and at Ridge Row one spring and one well, and no doubt many, especially at Ridge Row, used spring-water; but the majority of these sixty families used river-water exclusively, and continued to do so until April, and, as above stated, no case of the fever has appeared among them."

Dr. Taylor has also been misinformed, as the following statements will prove.

Ridge Row did *not* receive any river-water during the entire winter, as claimed by Dr. Taylor, nor has it received water from that source up to the present time. The hydrants at Ridge Row are supplied in the following manner: A pipe crosses over from No. 2 reservoir of the Delaware and Hudson Canal Company to supply

No. 5 breaker, situated in Polk Hollow. This pipe is tapped at Ridge Row, and the hydrants are attached to it; but during the entire winter, and up to the present time, the valve situated in the pipe leading from No. 2 reservoir to No. 5 breaker has been closed, thus effectually preventing any water entering that channel. The inhabitants of Ridge Row depended *solely* upon the well and spring water for their supply. Mr. O. M. Lance, superintendent of the Plymouth Water Company, stated to me that he was under the impression at one time that Ridge Row had received river-water, but that after discovering his mistake he had telegraphed to Drs. Shakespeare and French to the effect that they were not to use this information, as the statements which he had made to them relative to the matter were erroneous. I am also indebted to the foreman of the pumping station of the Delaware and Hudson Canal Company for the statement of these facts. Broadway, it is true, is supplied with river-water by means of three hydrants, but there are also two wells and two springs situated there, and the community, according to their own statements, use the well and spring water for drinking purposes. They are afraid of the river-water, past experience having taught them that it is contaminated. Only one case of typhoid fever has occurred in this community, this being a case of Dr. F. L. McKee's, the origin being *clearly* traceable to the drinking of contaminated *river-water*. Dr. Taylor further states that several persons came to Plymouth after the pumping of the river-water ceased, and consequently they could drink nothing but reservoir-water. Dr. Taylor loses sight of the *fact* that river-water was pumped into the lower or distributing reservoir as conceded by Drs. Shakespeare and French, in consequence of which fact persons arriving after the pumping ceased drank a mixture of river and mountain water.

Again quoting from Dr. Taylor, Dr. C. W. Spayd, a medical friend, in answer to certain inquiries, gives me the following:

"In the summer of 1884, typhoid fever broke out in Whitewash Hollow, a small valley that runs from No. 2 to No. 4 breaker and up to the Boston slope just below Larksville. In nearly every house from No. 2 to No. 4 breaker one or more members were down with it up to March of this year. The snow melted in that locality during the latter week of March very rapidly, filled the creek with running water, and, as the people were indifferent as to what was done with the excreta, it was carried down said stream into the river below Boston Hill, just above Plymouth, and in my opinion the fever sprung from the germs that were carried down into the river from Whitewash Hollow."

Now, at first blush, this might seem a point for consideration; but that it could have had no effect whatever in causing this epidemic may be shown from the following statements:

First. This stream joins the Susquehanna at the upper end of Plymouth, and anyone taking the trouble to examine it will find that it remains a distinct stream, flowing close to the right bank of the river for a long distance, and does not readily mingle with the general current. The Plymouth Water Company, however, took their supply two hundred and fifty feet from shore.

Second.—There is but very little sewage carried by this stream at any time, as but few houses are situated directly upon its banks.

Third.—Whatever this stream might contain, it did not, by any possible chance, empty any surface-water into the Susquehanna in March previous to the 26th, much less previous to the 20th, for the temperature during the greater part of March was far below the freezing-point, thus preventing any thaw of any consequence at this time. As is well known, March was the coldest month of the past winter. On March 20th, the maximum temperature was 20° F.; March 21st, 20.1° F.; March 22d, 20.1° F.; March 23d, 23.2° F.; March 24th, 35.6° F.; March 25th, 34.8° F.; March 26th, 46.5° F. So it will be seen that there was no day previous to March 26th that it would be possible for any considerable thaw to take place.

I grant to Dr. Taylor that the pollution at this point occurred too late to enter as a factor into the production of this epidemic, but suppose that we apply the same test to the mass of typhoid dejecta situated upon the bank of the mountain stream. The excreta from the patienta ffected with the disease at this point were thrown upon the frozen ground from January until some time in March.

The mean temperature for the month of January was 24.8° F.; February, 17.8° F.; March, 25.6° F. The daily mean temperature from March 20th to March 26th inclusive was respectively 9.7° F., 11.2°, F., 12.9° F., 16.4° F., 27.5° F., 27° F., 38° F. It will be seen, as stated by Dr. Taylor, that any considerable thaw was impossible previous to March 26th. He nevertheless asks us to believe that the typhoid dejecta situated upon the mountain-top (where the temperature remained considerably lower than at Wilkesbarre, at which place this record was taken) passed through the period of decomposition necessary before the assumption of its active state, was discharged into the mountain stream, flowed on through three successive reservoirs, and was received by the inhabitants of Plymouth, they passing through the period of incubation necessary before the appearance of the epidemic upon April 9th.

This is almost *too* much to accept in the face of the facts cited above.

The average period of incubation, as ascertained by Lothholz, Gerhardt, Haegler, and Liebermeister, is twenty-one days. In accordance with this period the specific results following the pollution of the river-water by the typhoid dejecta situated upon the bank of the mountain stream could not have been attained (allowing some time for the period of decomposition) before April 15th to April 18th. Now, what occurred at this time? A large increase in the number of cases, pointing, we think, to a double contamination.

Dr. Taylor furthermore states that some persons who came to Plymouth upon April 1st, and drank the water for the first time upon that date, were taken sick as early as April 15th, showing a period of incubation of about two weeks. I quote from Liebermeister (in Ziemssen's Cyclopædia), to the effect that patients coming from a distance into a locality infested by typhoid fever succumb earlier to the disease and pass through a shorter period of incubation than those residing in the infected district. It must also be remembered that these patients drank of the reservoir-water at the time when it was doubly contaminated, thus receiving the poison in a more concentrated form. The natural assumption is that the period of incubation would be somewhat shorter in these cases.

We conclude,

First.—That the production of the epidemic of typhoid fever at Plymouth, Penn., was not *solely* dependent upon the contamination of the reservoir-water by the dejecta of the one patient affected with the disease, but *was* the result of several concurrent causes, *prime* among which was the drinking of contaminated river-water; and that this was followed by contamination of the pipes by the river-water which they had previously contained, contamination of the distributing reservoir by the river-water that had been forced into it below, and subsequently, pollution above by the typhoid dejecta of the patient situated upon the bank of the mountain stream.

Second.—That the continuance of the epidemic was influenced by the existing sanitary condition of the town and the establishment of independent foci of infection, resulting from the careless disposition of the evacuations of those affected with the disease, and the negligence exhibited in the carrying out of the measures for disinfection, as prescribed by the physicians.

Third.—That as a result of this careless disposition

and non-disinfection of the typhoid excreta, the air became contaminated, thus adding another mode of infection.

If these conclusions are correct, it would be a serious wrong to permit the people of Plymouth to rest in the conviction that all medical authority favors their free use of the water obtained from the Susquehanna River, however much such conviction might benefit the officers and stockholders of the Plymouth Water Company.

It affords me pleasure to acknowledge the courtesy which I have received at the hands of the physicians and citizens of Plymouth, and my indebtedness to all those who have so kindly answered my inquiries and aided me in the gathering of the facts contained in the above article. I also desire especially to express my thanks to Rev. Dr. Hodge, of Wilkesbarre, who furnished me with such a reliable record of the thermometric range.

Clinical Department.

RHUS TOXICODENDRON IN THE TREATMENT OF ENURESIS.

Dr. George W. Willeford, of Glendale, Ind., writes: "On reading the excellent article upon enuresis in The Record of June 27th, by Alexander W. Stein, M.D., I was very much surprised to find that in enumerating the drugs employed in the treatment, he failed to mention the most efficient remedy which I have yet employed. In the limited experience had in the treatment of enuresis in the past two or three years, as it has occurred in a country practice, I have found the fluid extract of rhus aromatica to give permanent relief in seventy-five per cent. of the cases treated, and to greatly benefit the remaining twenty-five per cent. As the article is comparatively a 'new remedy,' I have no doubt that there are many excellent practitioners who have never given it a trial. To those who are sorely puzzled to know what remedy to 'try next' in obstinate cases of enuresis, I will say, try a good preparation of the fluid extract of rhus aromatica, and you will find in it a pleasant and generally an efficient remedy."

HEMIPLEGIA AND ABORTIONS.

Dr. W. F. Lynch, of Volcano, Cal., writes: "Mrs. L——, aged twenty-nine, a lady of what may be termed a nervous temperament, with good family history, as far as learned, mother of four children, the youngest being at the time of which I write, four years of age, was stricken on July 11, 1884, with hemiplegia involving the right side. She was found at 6 A.M. on the floor unable to rise. Assistance was called and patient put into bed. I saw her an hour later. She was utterly unable to move arm or leg; the right facial muscles were also involved to a considerable extent, the tongue protruded to the right, could not close upper eyelid firmly and the face on this side was devoid of expression; there also existed some difficulty in deglutition. The sense to touch was considerably diminished. She could speak with difficulty and not very intelligently. Two days later she could raise herself somewhat in bed and could move her arm and leg some, but she had no power to move her fingers and toes. For a few days there was a little tendency to retention of urine, but this passed soon. She improved rapidly in strength and power to move her limbs, with, at the same time, an improvement in mind, though an aphasic condition still continued, until at the end of two weeks she could walk about the house by pushing a chair in front of her for support, and with the use of the battery, combined with the administration of tonic remedies and good diet, was in a fair way toward great improvement. About ten days after the attack of hemiplegia came on, the patient informed me she had been flowing for a week or ten days slightly, but this had increased considerably and I was shown an embryo which had been discharged a day or two before. Ergot in moderate doses was ordered, but this seemingly was not of much utility, and gallic acid was then ordered and the hemorrhage was controlled a day or two later.

"Up to August 9th patient continued gradually to improve and was able to walk out to some extent, though the leg dragged a good deal and she had not regained the use of the arm. The mind seemed brighter, yet her speech remained considerably impaired, thick and heavy, and the memory was not very clear.

"On September 3d the patient had another miscarriage from which nothing serious resulted. She continued after this to gain little from time to time, in strength and in the use of the lower limb—her arm did not improve.

"On November 14th at 4 A.M., I was summoned in haste, and found that the patient had been flooding profusely, the bed-clothing about her being thoroughly saturated with blood and the woman in a fainting condition; extreme pallor of face, and pulse very small and soft. The hemorrhage had ceased to a great extent before my arrival. Ten days before this, she had walked quite a distance to consult a female abortionist. The exertion of walking, or the abortionist, either one or both, had proved too much for her, for the next morning hemorrhage commenced, and a week later a fœtus of about two months' development was expelled, but not the placenta. After fœtus came away, hemorrhage ceased for two or three days, but returned with a rush on the date mentioned. A slight flowing continued for four or five days, at which time I removed, without much difficulty, the placental remains. After this the patient became better and was up and able to walk about as before, and I did not see her again until December 16th, when I was again called in. She had been taken about the 5th, during my absence from town, with an attack of fainting, followed by great nervousness, suffering from pain in the cardiac region, cardiac palpitations, and since had been confined to her bed. I found her in a very despondent condition, unable to control her emotions, subject to excessive fits of weeping and inordinate laughter, memory seemed failing, and there was pain felt in the left parietal region, quite severe at times. On several occasions passed urine in bed involuntarily, and on the next day, the 17th, passed fæces in bed without her knowledge. On this date Dr. T. H. Mayon, of Amador City, saw the case in consultation, and noted a tender spot in the spine about the fourth or fifth dorsal vertebra. The result of the consultation was, that the case was pronounced hopeless as to cure, and an early and fatal result anticipated.

"A few days before the consultation, uterine hemorrhage again commenced slightly, but no thought was given to it as the period for menstruation was due. The hemorrhage, however, continued up to January 28, 1885, and at times was a little foul. I determined to introduce a sponge tent and learn by digital exploration, if possible, the cause of the continued flowing. I did so, and the following day, the tent having been within the cervix uteri about twenty hours, thoroughly curetted the uterine walls and brought away quite a quantity of small granular masses. The hemorrhage ceased in a day or two, and from that time there was no more involuntary micturition.

"The patient has not been able to walk, nor has she been as well since the fainting fits occurring in December, which were probably further hemiplegic attacks. At times since January she seemed to grow a little stronger and felt better, yet during the last two or three months she has failed very greatly. She cannot stand without strong support. The flexors of the arm are in a state of constant contracture, and at times she suffers very severely from painful tonic spasms of muscles of the arm. The muscles of the leg are also affected in like manner, though not so marked. Both limbs have wasted away a

great deal. The right facial muscles are still affected, though she has much greater power over these than formerly. Her mind is very weak, and her specch very heavy and almost unintelligible. At times she has manifested suicidal tendency, and she is greatly troubled from insomnia. The treatment has been essentially of a tonic nature, good nourishing diet, and as remedies, iron, quinia, strychnia, and nux vomica mainly, the occasional use of the battery until the last two months, and regular use of friction to the affected side.

"One point not mentioned which perhaps should have been referred to at the commencement of this article is this: the patient has been a victim to twelve miscarriages in three years, three occurring from the time of the first hemiplegic stroke, from July 11th to November 14th! Is there any wonder that nature, so greatly imposed upon, should at last enter a protest against such maltreatment, for all these abortions were induced either by the patient herself or by a female abortionist?

"Another interesting point, was the relief of the involuntary micturition, following the curetting of the uterus for hemorrhage; this symptom continuing from about December 5th, the time the hemorrhage commenced, up to January 29th, almost to the very hour of the operation of curetting the uterus."

Progress of Medical Science.

A Case of Cholecystotomy.—Dr. Parkes, of Chicago, in the July number of *The American Journal of the Medical Sciences*, reports an interesting case of cholecystotomy, which operation appears to be becoming a rather common one in these days of fearless abdominal surgery. Of the cases submitted to operations, by far the larger portion has been of cholecystotomy, by means of which a distended gall-bladder has been positively relieved, and in most of them the cause of obstruction, retained gall-stones, removed. In a few no gall-stones were found, while in others the cause of the obstruction could not be remedied. In Dr. Parkes' case the gall-stones were not lodged in the gall-bladder, and it is highly probable that they were retained in some of the dilated hepatic ducts, and were washed into the cyst by the flow of biliary fluid which came on immediately after the formation of the fistula. He is inclined to believe that they had but little to do with preventing the flow of bile into the intestine, at least the patulency of the passages was not restored by their removal. The remarkable and profuse flow of muco-biliary fluid, coming through the sinus established, argues very strongly in favor of the operation which contemplates the formation of a fistula in the gall-bladder in distention thereof by confined secretions. Certainly no tube of the dimensions of the ductus communis choledochus could have given a free exit to the secretions; at least the accompanying back pressure on the walls of the cyst would have greatly endangered, if not certainly destroyed, the adhesions in any recent wound thereof, even when protected by the continued suture. Most of the cases of reported cholecystotomy tell of the presence of a freer flow through the fistula, so that it is a condition to be expected, and makes immediate closure of the bladder-wound without drainage a dangerous proceeding to adopt, even if we can be positively sure of a clear common duct. Dr. Parkes, in conclusion, advises, from his experience in this case, the general practice of sounding the common duct through the external opening. He is quite sure that such procedure can be safely carried out, and equally certain that its adoption in his case resulted in relief that did not follow the removal of the calculi alone.

The Pneumonia-coccus of Friedlander.—Dr. Sternberg calls attention to the so-called pneumonia-coccus of Friedlander, which he claims is, in fact, identical, specifically, with a micrococcus which he previously described, and which is found in normal human saliva, and with that found by Pasteur in the blood of rabbits which had been injected with the saliva of a child which died of hydrophobia in one of the Paris hospitals. This micrococcus he names *Micrococcus-Pasteuri*. The capsule, or mucous envelope, which sometimes surrounds this micrococcus, described by Friedlander in 1883, and photographed by Sternberg two years previously, cannot be accepted as a distinguishing character of this species, inasmuch as it is not constantly present, and the circumstances upon which its development depends have not been accurately determined. It is established that this is a pathogenic organism, as far as certain lower animals are concerned, and that its pathogenic power varies under different circumstances. It seems extremely probable that this micrococcus is concerned in the etiology of croupous pneumonia, and that the infectious nature of this disease is due to its presence in the fibrinous exudate into the pulmonary alveoli. But this cannot be considered as definitely established by the experiments which have thus far been made upon lower animals. The constant presence of this micrococcus in the buccal secretions of healthy persons indicates that some other factor is required for the development of an attack of pneumonia; and it seems probable that this other factor acts by reducing the vital resisting power of the pulmonary tissues, and thus making them vulnerable to the attacks of the microbe. This supposition enables us to account for the development of the numerous cases of pneumonia which cannot be traced to infection from without. The germ being always present, auto-infection is liable to occur whenever from alcoholism, sewer-gas poisoning, crowd-poisoning, or any other depressing agency, the vitality of the tissues is reduced below the resisting-point. We may suppose also that a reflex vaso-motor paralysis, affecting a single lobe of the lung, for example, and induced by exposure to cold, may so reduce the resisting power of the pulmonary tissue as to permit this micrococcus to produce its characteristic effects. Again, we may suppose that a person whose vital power is reduced by any of the causes mentioned may be attacked by pneumonia from external infection with material containing a pathogenic variety of this micrococcus having a potency, permanent or acquired, greater than that possessed by the same organism in normal buccal secretions.—*The American Journal of the Medical Sciences*, July, 1885.

The Treatment of Hemorrhoids by Injection.—In the July number of *The American Journal of the Medical Sciences*, Dr. Kelsey, of New York, again urges the treatment of hemorrhoids by injection of carbolic acid. After an ample experience this has become his routine practice, and in all his cases he has never known a patient to abandon the treatment after it was begun, and he has never failed to effect a perfectly satisfactory cure by it, and he has never had an accident of serious nature with it. He uses three solutions, one of fifteen per cent., one of thirty-three per cent., one of fifty per cent., and sometimes he uses the pure acid. In a severe case he begins with the stronger ones, in a mild case, with the weaker.

A New Remedy in Gouty Obesity and Dyspepsia.—In the *Lancet*, April, 1885, Dr. Mortimer Granville writes that he has been obtaining good results of late, in cases of gouty obesity and dyspepsia, from the use of the salts extracted from ox-bile. They are given to persons with a predisposition to gout, in whom there is a tendency to the deposition of fat in the omentum and elsewhere, coupled with a deficiency of production and maintenance of heat. The bile-salts are given in the form of a pill, each containing about four grains of the taurocholate and glycocholate of soda, and are to be taken with food at each meal.

Chloral in Large Doses in Traumatic Tetanus.—Professor Verneuil records a case of tetanus which occurred in a youth, who was admitted into hospital, ten days after his finger had been crushed, suffering from a moderate amount of trismus. The patient was of robust frame, and in good condition of health when admitted; and was placed in Bonnet's apparatus in order to secure absolute immobility of his body, which was kept at a constant and elevated temperature by being completely encased in wadding. Good diet was given, and constipation guarded against. Large doses of chloral were administered, in sufficient quantities to plunge the patient into a profound sleep. It is necessary to continue giving chloral in doses which shall keep the patient in a kind of continuous coma for from fifteen to eighteen days. The author states that the great benefit derived from chloral in these cases is to give the drug freely for at least fifteen days, and then to gradually reduce the amount each day. The amount usually necessary is from twelve to fifteen grammes daily. The danger in tetanus is due to the extent that the muscles of the larynx or pharynx, together with those of the heart and lungs, are involved. In cases where suffocation, dysphagia, or spasm of the glottis supervene, two methods of treatment are available: 1, the continuous current; 2, tracheotomy. The author concludes by saying that in the next case which presents itself to him, with symptoms of dysphagia, he intends to practice gastrostomy in order to feed the patient.—*Gazette des Hôpitaux.*

Hard Chancre of the Tongue.—Dr. A. Newskji relates the case of a young woman, a virgo intacta, who had a primary sore on the under surface of the tongue. She was a servant in a cheap Russian hotel where wooden spoons were used, and the author believed the infection was caused through that medium.—*Centralblatt für Chirurgie*, April 25, 1885.

The Success of Hypodermic Injections of Quinine in Malarial Fever.—The high price of quinine induced Dr. A. Smirnoff (*London Medical Record*, June 15, 1885) to give an extensive trial to a long list of various substitutes for the classical antimalarial drug. Carbolic acid, salicylic acid, burnt alum, tincture of iodine, tincture of eucalyptus, oil of eucalyptus, oil of turpentine, lemons, and faradization of the spleen, all were resorted to successively, and all of them gave uniformly negative results. With deep regret in regard to waste of time, the author returned to the exclusive use of quinine, striving at the same time to find out a most economical method of freeing the soldier from severe Bessarabian fever in that way. Dr. Smirnoff thinks that he succeeded in finding something like the desideratum in the shape of hypodermic injection of hydrochlorate of quinine, the method which is at present practised by the author to the exclusion of all other means. He injects six grains of the hydrochlorate (dissolved in half a drachm of distilled water) at a time, by means of Lewin's syringe, into the subcutaneous cellular tissue below the scapular region. In the course of 1884 he successfully treated in that way 470 malarial soldiers, the whole number of injections being 1,179; that is, a case required, in average, 2.5 injections; the greatest number of the latter in an individual case was 9. Relapse after the subcutaneous treatment occurred decidedly more rarely than after the internal administration of quinine. That the hypodermic method is much cheaper than the internal one may be gathered from the following comparison. To cure 178 patients treated by the internal use of the alkaloid, the author has used 7,019 grains of sulphate of quinine, or 39.5 grains per head. To cure 470 patients treated hypodermically, he used 7,074 grains of muriate of quinine Taking an eight-grain dose of the hydrochlorate as equivalent to a ten-grain dose of the sulphate, we have an average dose of nineteen grains of quinine in the case of the hypodermic treatment against that of 39.5 grains in the case of the internal administration. The author never saw the appearance of any unpleasant phenomena at the spot of the injection (such as abscesses, sloughing, intense irritation). Pain was always trifling and of short duration. In some of the patients with very sensitive skin there occurred bright redness, about three or four centimetres in diameter, but it quickly disappeared spontaneously. As to the essential advantages of the hypodermic method (besides cheapness), the author points to its applicability at any stage of the disease, and to the sure and safe assimilation by the patient's system of every particle of the drug used.

Suppurative Hepatitis.—Ughetti gives the history of eight cases of suppurative hepatitis. In three, the hepatic abscess was opened externally by incision through the abdominal wall: these cases recovered. In one, recovery followed repeated aspiration. Two died, notwithstanding aspiration and incision. In two, the abscess opened spontaneously by the bronchi, recovery resulting. Among the causes of suppurative hepatitis, wounds are most rare. Dysentery is a much more frequent cause. The hepatitis may be developed contemporaneously or consecutively, therefore possibly there is a common origin to both. The disease, as is well known, is most common in hot climates. It is said that non-acclimatization is a predisposing cause, but in the cases observed by Ughetti this did not appear. All his cases occurred in men, twenty-six being the age of the youngest, forty-three of the oldest. The fever of suppurative hepatitis is variable in intensity and duration. When present it is generally intermittent; often it only appears when the collection of pus is too great for the cavity containing it. In a case published by Ciaramelli (Naples, 1880), there had never been any fever, yet a vast abscess of the liver was found, encapsuled by a thick layer of connective tissue, which prevented the reabsorption of the pus. Discussing the symptoms, Ughetti remarks on the influence of palpation, hepatic pain, pain in the shoulder, jaundice, deeply pigmented urine, etc. As to the diagnosis, he mentions specially the difficulty in certain cases of distinguishing suppurative hepatitis from Naples fever, in which the course of the fever is very irregular. He advises exploratory punctures for diagnosis and treatment. Entire hepatic cells are not ordinarily found in the pus, but may sometimes be obtained on scraping the bottom of the abscess. The prognosis is not as hopeless as most authors assert. In forty-eight cases not operated on, the mortality was seventy-six per cent. In forty-five cases in which incision was practised, the mortality was only forty-two per cent. In thirty-eight cases opening spontaneously by the bronchi, the mortality was only 14.6 per cent. All cases should be operated on as early as possible; peritoneal adhesions are not indispensable. Aspiration is often sufficient to effect a cure.—*London Medical Record*, June 15, 1885.

Lipomatous Polypus of the Gullet.—Dr. J. J. Minkewicz, of Tiflis, details the case of an Armenian, aged fifty-two, who for two years experienced steadily increasing difficulty in swallowing solid food, and of late could sleep only in the prone position, all other postures causing attacks of suffocation. Examination detected a soft, elastic, pyriform tumor, of the size of a large hen's egg, which was attached, by means of a broad pedicle, to the anterior wall of the gullet at the level of the cricoid cartilage. The tumor became visible in the pharynx (just behind the soft palate and tongue) only when the patient performed several successive eructative movements. The author tightened an elastic loop round the pedicle and put two ligatures higher up. On the next day he divided the pedicle between the ligatures, the removal of the new growth being absolutely bloodless. Four days later the patient was discharged well and comfortable.—*London Medical Record*, June 15, 1885.

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AT LAST.

SINCE our last bulletin was written the final change has come to General Grant. He passed peacefully away at eight o'clock Thursday morning. On the morning of the day previous Dr. Douglass summoned Drs. Sands and Shrady to meet him in consultation at Mount McGregor, as General Grant was sinking and death seemed imminent. On their arrival the patient was found in a very prostrated condition, with feeble and frequent pulse, rapid respiration, and inability to swallow. He was suffering no pain, but by his listless manner was apparently conscious that death was approaching. It was decided to sustain his vital powers to the utmost, and make his approaching end as comfortable as possible. The disposition to cough had ceased, and the respiration, although much accelerated, was not mechanically impeded by accumulated mucous secretions. At the time of the consultation he was in his easy-chair, occupied so constantly by him day and night for the past five months.

Toward evening, by his own request, he was transferred to his bed, where he rested quietly until his death. As was anticipated by the medical gentlemen in attendance, he continued to sink despite the stimulants locally applied and hypodermically administered. His fear of a painful and agonizing death was, happily for him and his family, not realized. He simply passed away by a gradual and easy cessation of the heart's action. Thus he was spared much of the suffering which would have been inevitable had his general strength allowed the throat disease to progress in its usual way. For so much, at least, there is reason for thankfulness. At a future time a scientific review of the case will be presented to our readers, giving such data as may be necessary to explain the diagnosis arrived at, and the method of treatment pursued.

TUBERCLE BACILLI IN THE BLOOD AND SPLENIC JUICE IN ACUTE MILIARY TUBERCULOSIS.

IT is a noteworthy fact that some time before Koch's discovery of the bacillus tuberculosis, Weigert had asserted that acute miliary tuberculosis was due to the breaking through of tubercular material into the general current of the circulation. According to the author named, the blood in this way became infected with the specific virus, and disseminated miliary nodules soon made their appearance.

Weichselbaum (*Wiener Medicinische Wochenschrift*, Nos. 12 and 13, 1884) was the first to detect in the blood of three bodies, dead of acute miliary tuberculosis, the presence of the specific bacilli. Subsequently Meisel recorded similar observations for eight additional cases (*Wiener Medicinische Wochenschrift*, Nos. 39 and 40, 1884). It should be remembered, however, that in no instance were bacilli found in great abundance. Indeed, in some cases many specimens of blood were examined with negative results. Nevertheless, Meisel claimed that the presence of these microbes in the blood must be regarded as a constant and pathognomonic sign of the disease.

Meisel further tried to discover the bacilli *intra vitam* by withdrawing in the usual way a small quantity of blood from the fingers of suspected patients. In the only two cases in which this was done, one gave a positive, the other a negative result.

But the same writer also found that the pulp removed by scraping the cut surface of the spleen was comparatively rich in tubercle bacilli. And he suggested that splenic juice might be readily obtained from the living by means of an ordinary hypodermic syringe.

In this way he believed a positive diagnosis could be easily reached.

Acting upon this rather novel suggestion, Dr. Rütimeyer (*Centralblatt für Klinische Medicin*, May 23, 1885) in two cases obtained a quantity of splenic blood-juice for examination.

In the first case, the spleen having been punctured in four different places and twenty specimens having been prepared, no bacilli were discoverable. The patient died sixteen hours after the above procedure, and an autopsy showed that acute miliary tuberculosis was the cause of death. No tubercle-bacilli had been found in the sputum of this patient. It may be added that the spleen was turgid and large, and showed four small rents in its capsule, that were loosely matted to the abdominal walls by recent blood-colored fibrinous deposits. Splenic hemorrhage had not occurred.

In the second case only two punctures into the spleen were made, the patient being almost moribund at the time, and death happening fifteen minutes later. At the autopsy the clinical diagnosis of acute general miliary tuberculosis was amply verified. From the punctured spleen about one ounce of dark blood had escaped. This organ, in addition to countless miliary nodules, also contained numerous cheesy collections of about the size of a pea. In this case an examination of the splenic juice, removed while the patient was still alive, showed in every specimen examined unmistakable tubercle bacilli. In some specimens they were rather abundant, but in the majority of them they occurred sparingly.

Scrapings from the cut surface of the spleen showed great quantities of bacilli. Singularly enough, blood taken from the heart gave negative results.

In spite of the limited number of these observations, Rütimeyer holds that the method may afford valuable evidence in doubtful cases. It is apparent, however, that the procedure has a scientific rather than practical interest. It would hardly be resorted to at the earliest suspicion of miliary tuberculosis, in spite of its seeming harmlessness. Later on, however, it would appear to be

a superfluous infliction on patients whose doom is sealed, whether we can snatch a few bacilli from their yet living bodies or not. And finally, from the evidence now before us, we have no right to suppose that such a discovery is necessarily pathognomonic of the condition in question. Moreover, the absence of tubercle-bacilli from splenic juice does not apparently negative the existence of acute miliary tuberculosis.

A SURGICAL USE FOR ROASTED COFFEE.

SUGAR is known to form a tolerably good wound-dressing. Dr. Oppler, of Strassburg, now comes forward with the statement that pulverized roasted coffee is a superior antiseptic. It, therefore, only remains to show that milk makes a good surgical dressing, and the traumatic process will be supplied with a very neat repast.

Oberstabarzt Oppler, in his preliminary communication (*Deut. Militärärtz. Ztsch.*, Heft 6, 1885), states that the powdered coffee is spread over the wound so as to completely cover it. Soft bandages are then applied, and the wound may be left untouched for three or four days. The wound secretions mingle with the powder, forming a protective cover under which the healing process goes on. The antiseptic properties of burnt coffee depend upon the fact that it is in part a vegetable charcoal, and that it contains an aromatic antiseptic oil.

Dr. Oppler's discovery will not divert coffee from its natural use, but, as he suggests, there may often be occasions in which a surgeon may find it convenient.

CREDÉ'S METHOD OF DELIVERING THE PLACENTA.

IT will be conceded by all physicians that the conduct of the third stage of labor is frequently the most important duty of the accoucheur. The great importance of thoroughly emptying the uterus of all the secundines is emphasized by the prevalent ideas of the septicæmic origin of puerperal fever. After the pains and trepidation of the second stage of labor are over, the relief and satisfaction experienced by the patient and friends are frequently in contrast with the annoyance of the physician at the non-appearance of the placenta, coupled with an uncertainty as to the most desirable manipulation to hasten its delivery. That much harm may be done by making excursions into the uterus, particularly with fingers not thoroughly antiseptic and by violent massage of the abdomen, cannot be doubted. The method of expectancy that will patiently wait, perhaps for hours, until unaided nature expels the placenta, finds scant favor in this bustling country. Although certain Germans, having continual fear of puerperal septicæmia, may be willing to wait with folded hands great lengths of time, we fancy the average American physician would find it equally difficult to restrain his own as well as the patient's uneasiness at undue delay. Some means or other being employed to hasten the emptying of the uterus, it may be well to notice particularly what constitutes the method of Credé, as many books and writers are rather obscure upon this familiar subject. Simple kneading of the abdomen and more or less severe pressure over the uterus do not, as supposed by some, constitute Credé's method. The object of Credé being only to assist nature, all violent and unnecessary manipulations are to be discountenanced.

As soon as the second stage of labor has been completed, the accoucheur must aim to effect a loosening of the placenta by encouraging the uterus in tonic contractions, and this is best accomplished by "gentle stroking movements over the largest possible surface of the uterus." When *clonic* contractions begin, by which agency the placenta is to be expelled from the uterus, this organ is to be grasped by the outspread fingers and hand, and pressure be made at a time when each contraction reaches its greatest energy. The pressure upon the uterus is to be made in the direction of the hollow of the sacrum. Sometimes in this manner the placenta will be expelled from the uterus with the first contraction, and nearly always by the sixth or seventh pain.

Credé considers that if the placenta has not been delivered within thirty minutes, the case is no longer physiological, but pathological. It is thus seen that this method aims to imitate and aid nature in getting rid of the afterbirth, by exaggerating the contractions with which this is to be accomplished. Indiscriminate kneading and pressure in the interval of the normal clonic contractions is forbidden as unphysiological and wrong. Credé aims to expel the placenta, having the membranes intact, without manual interference within the genital organs. In an article in the *American Journal of Obstetrics*, Dr. Baruch, after reviewing the different plans of managing the third stage of labor, including a thorough description of Credé's method, concludes that the latter should be better understood and practised by American physicians. He would, however, somewhat modify the last stage of the proceeding, by placing two aseptic fingers within the vulva to impede the too rapid descent of the placenta, which is held within the vulva, or partly within the vagina, until the uterus recedes. The mass is then gently removed until the membranes are put upon the stretch, being held in this position while the index-finger gently presses against the membranes, near their placental attachment, until the uterus relaxes its hold upon them, and the whole mass drops. By this plan it is endeavored to insure a complete removal of the membranes.

THE COLLAPSE OF FERRÁN.

ANOTHER delusion is gone, and another hope crushed. There is sufficient evidence now at hand to warrant the positive assertion that Ferrán's preventive inoculations for cholera are erroneous in theory and useless in practice. In fine, Ferrán is a gigantic humbug.

Dr. E. Doyen has carefully gone over Ferrán's methods of cultivating the cholera bacillus, and has made a report of his work to the Société Anatomique of Paris. He shows that Ferrán's methods are faulty, and that the life-history which he gives of the comma-bacillus is not correct. He has repeated the inoculation experiments of Ferrán on guinea-pigs with negative results, and he concludes that the Spanish pseudo-Jenner is inoculating his countrymen with a benign form of septicæmia.

We have learned not to place much faith in French cholera commissions, but the report of the last one, which was sent to Spain under the direction of M. Brou-

ardel is worthy of credence. We learn from *L'Union Médicale* that Brouardel has made an official communication to the Académie de Médecine, in which he announces that the performances of Ferrán are not worthy of scientific investigation.

Last of all comes a report from a physician, Dr. La Granjà, who accompanied the Spanish commission to investigate the condition of the cholera epidemic in Valencia. Dr. La Granjà affirms that Ferrán's statistics prove nothing, and that his inoculations do good only in that they allay fear.

The much-talked-of cholera vaccinations, therefore, according to present evidence, are simply inoculations of septicæmia. The physical results, fortunately, have never been dangerous, while the moral effect, it must be admitted, has been good.

THE EVENING POST AND CIVIL SERVICE REFORM.

THE practical working of certain phases of civil service reform has apparently made some journals unduly sensitive to even a friendly criticism of this much-lauded system. The *Evening Post* has been much exercised over a statement made by us, on the authority of the principal officer of the municipal civil service commission, that the appointing power is not obliged to select from the three highest names on the examination list, but can choose men standing lower in the scale for appointment to office. While we are concerned more with the working of the system than with the letter of the law, we did not state what was or was not the law on this subject. Our object was only to criticize the practice, and the *Post* retorts by quibbling over the rules.

We do not deny that there is a Seventh Commandment, but if we should attack adultery, and the *Post* should defend the verbal explicitness of the Moral Law (which we greatly fear it would not), the conditions would be very like those in the present controversy.

We stated what we were distinctly informed would be the practical working of the commission, and characterized it as a weak point in the present system. As a matter of fact, the appointing powers have not been compelled to select from the highest names on the list, no matter what the law may state on the subject. In this way it not only has been possible, but actually has happened, that men standing quite low on the list, but having strong political influence, have obtained office. Why does not the *Evening Post*, that is so exercised over civil service reform, look into and criticise the actual working of the system, instead of quibbling over the letter of a law that is not obeyed?

DIET IN HOT WEATHER.

THE debilitating effects of prolonged high temperature are nowhere more markedly exhibited than in the gastro-intestinal tract. In infants and young children the great frequency of diarrhœa in summer, is not only due to fermentative changes wrought in their food, but also to the directly depressing effects of the heat upon their susceptible nervous systems. The two elements of improper food and lowered nervous vitality must be considered by physicians in adults as well as in children, although the former do not suffer so seriously, or fatally, as the latter. What is the best kind of nourishment with which to tax the weakened digestive organs during a heated period? The answer is trite, and can frequently be left to the common-sense of the patient. Unfortunately, however, as every physician knows to his sorrow, the possession of common-sense in regard to eating and drinking is entirely lacking in many individuals. To such persons very explicit directions are necessary as to diet. In reference to environment, the prolonged heat of summer affords much the same conditions as obtain in the tropics, where the inhabitants instinctively subsist largely upon vegetables, consisting in a great degree of proximate principles found in the class of carbo-hydrates. Yet many people living in temperate regions continue materially upon the same diet in summer as in winter, and at a time when the atmospheric conditions not only weaken the nervous mechanism of digestion, but curtail physical activity, use the nitrogenous diet that they craved in cool weather, and when taking abundant exercise.

To force albuminous foods in summer is but to surcharge the system with effete products, and overtax the excretory organs in their elimination. Meats, and particularly fats, may then be allowed to occupy a subsidiary place in the dietary, while a large variety of fresh vegetables will be more grateful to the heated body. Different fruits, especially those more or less acid, will likewise prove agreeable as well as healthful. Fresh fish may be relished when meats fail to tempt. In reference to drinks, buttermilk and kumyss may be noted as both refreshing and nourishing, and will frequently agree with a patient when ordinary cow's milk causes indigestion. The small amount of alcohol and slightly acid taste developed in kumyss will often make it acceptable to a stomach that rejects solid food. Indeed, it would be much better for persons overheated to take such drinks as are here mentioned, than to try from a sense of duty to force solids into a stomach that refuses to digest. While ice-water is refreshing and cooling, the enormous quantities indiscriminately consumed cannot fail to do harm. A mouthful slowly swallowed will be found more satisfactory than a gobletful hastily drained. Alcoholic drinks had better be very sparingly indulged in; if they are taken, the light, dry wines will answer best. Plain advice to a patient about simple matters of diet will be just as satisfactory, and much more beneficial, than the dispensing of drugs at this season.

WHAT THE AMERICAN MEDICAL PROFESSION NEEDS.

THE profession of this country needs a national association of physicians which shall devote itself to purely scientific work. Membership should be based upon personal character, scientific attainments, and practical experience. It should be for the whole art of medicine what the special national organizations are to their departments. It should devote itself to promoting the medical art and medical science. Questions of medical politics and technical ethics should be left out entirely, for men who are interested in science are rarely interested in these.

An association of this kind, which will bring together

the best men in the country, and which will be, in truth, a representative meeting, would prove of immense benefit. Our leading men could then meet each other, compare experiences, and be subjected to helpful criticism. Methods of practice would become more uniform; progress in knowledge more quickly and widely diffused.

We do not agree with the opinion just now so freely expressed, that the American Medical Association has quite outlived its usefulness and has shown its incapacity. Let that Association devote itself to the object for which it was originally founded, viz., the reform in, and elevation of, medical education; let it deal with the various interesting issues of medical politics. Here is a field in which it may thrive, as is shown by its past. The French Association of Physicians, which deals with these subjects, has been very successful in its line.

News of the Week.

THE INTERNATIONAL MEDICAL CONGRESS.—"The result of this action of the Association has cast a shame and a blot upon the good name of the entire profession in this country, and it has forfeited all the reputation the Association may have had as a fair, liberal, and high-toned scientific body. Under the leadership of a few malcontents the Association has degenerated to the level of a ridiculous and pharisaical institution, utterly unworthy of confidence and respect. So far as the fortunes of the International Medical Congress are concerned it is now evident that the Association is wholly incapable of conducting the Congress under its auspices. The withdrawal of the leading members of the profession from all connection with the present organization tells its own story, and very plainly says, the Congress must be reorganized on some other basis than the one proposed by the American Medical Association if it is to be a success."—*Maryland Medical Journal.*

"The action of the new committee has, as pointed out by the *Medical News*, made of the coming International Medical Congress a meeting of the American Medical Association, with a rather larger number than usual of invited guests. Had the invitation been from the Association alone, there could have been no objection to this, but when, as expressly stated by Dr. J. S. Billings, U. S. A., a member of the original committee, 'the invitation was purposely worded as coming from the medical profession of the United States, and not from the Association only,' the exclusion by the Association from representation in the Congress, of the great bulk of the profession, including a large number of the brightest lights of American medicine, seems, not to put it too harshly, like a piece of unwarrantable assumption."—*Medical Age.*

"When we ask why they take this serious step, we learn that they have, in the first place, a deep distrust of the American Medical Association as an organization which could satisfactorily carry out such an undertaking, and they have a still deeper distrust of the success of any Congress where the best known scientific medical men of the country have been replaced by nominees such as Drs. Cole, Shoemaker, and others. The exclusion of the new-code men is felt to be a serious mistake, as carrying the quarrel of the American Medical Association into the International Medical Congress, and refusing the fellowship of men with whom old-coders in New York are glad enough to consult. All, too, resent the insult offered to such a veteran as Henry I. Bowditch, of Boston, who has devoted half a century to the advancement of the best interests of the profession in the United States. What the result will be it is difficult to predict, but it is hard to see how a Congress can be held without such men as those who have signified their intention of resigning. It would be like a Congress in London without Paget, Lister, Jenner, Gull, Hutchinson, etc."—*Canada Medical Journal.*

"If these men had first taken pains to learn accurately what the present Committee had done, and then assembled for the purpose of considering the more important items with a view of suggesting improvements, and thereby aiding the Committee in rendering their work more complete and acceptable, they would have given evidence that they had more regard for the honor and interests of the profession than for their own personal prejudices and dislikes; in other words, they would have acted like *men*, and not like half-grown school-boys. Although the assembly of twenty-eight in Philadelphia, the nineteen [twenty-four] in Boston, and the twelve [thirteen] in Baltimore [and thirteen in Washington], [add also St. Louis, Louisville, Lowell, Mass.; Newburyport, Mass.; Portland, Me.; and New York City], each solemnly adopt preambles and resolutions, not one of them specifies any particular provisions or rules that had been adopted by the Committee on Organization, the practical working of which would prove 'detrimental to the profession in America,' or in any other country."—*Journal of the American Medical Association.*

A POLITICAL CURE FOR MEDICAL PAUPERISM.—In England the law says that a man who seeks medical relief of the parish shall not vote. Taking advantage of this, the friends and promoters of provident dispensaries are urging the claims of their institutions. The Metropolitan Provident Medical Association of London has eleven dispensaries, of which four are self-supporting. In them 25,000 persons are treated annually for about $16,000. This is decidedly cheap, but it is better than the average dispensary of this city, which will treat the same number of cases for about one-third the sum. It is perfectly useless, however, to think of applying the stimulus of disfranchisement to medical paupers in this country. But it would be interesting, if such a proposition were seriously made, to see how effectively the pot-house politician could work up the bird of freedom, the Declaration of Independence, and the sacred rights of the people into a medico-political thesis.

THE KLEPTOMANIA OF PREGNANCY.—*The Lancet* makes this sensible annotation upon an interesting subject: "A lady, the wife of a merchant, was lately charged before Mr. D'Eyncourt with shoplifting. Her physician deposed that he should not consider her morally responsible for what she had done, as she was near her confinement, and in a peculiar condition. Her brother-in-law deposed that he had lately noticed a change in her. On these grounds, the prosecutors not pressing, the magistrate allowed the case to be withdrawn, remarking that

had not the accused been so near her confinement he should certainly have sent the case for trial. We are not disposed to quarrel with this decision. Moral obliquity is sometimes certainly associated with pregnancy, and the ordinary motives for unlawful annexation were here undoubtedly absent. Distinguished persons, whose sex debars them from this explanation, have been chronically afflicted with this disease, and yet have never found themselves in the durance to which they have felt it their duty to sentence others who merely took things which they required. The subject is a difficult one, but we should be glad to see reports of kleptomania among the poorer classes, who often inherit a strong tendency to thieving, recognized as such and treated accordingly."

THE DANGER OF BEING AN ANTI-VIVISECTIONIST.—M. Magnan cites a number of cases of madness among anti-vivisectionists. One woman first renounced animal food, then took in all stray dogs, and finally went round to the butchers, begging them not to slaughter any more cattle. She became finally mad, and was received as a patient at Charenton.

THE FRENCH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE will meet at Grenoble, August 13, 1885, under the presidency of Professor Verneuil.

A SERIOUS EPIDEMIC OF WHOOPING-COUGH has run through the islands of the Fiji group. The malady has carried off all the very young native children, and left a decrease in the population of 3,000. A few years ago 30,000 persons in Fiji died from an epidemic of measles.

CREMATION IN PARIS.—Current reports give it that cremation in Paris will soon be available for the general public, at the small cost of $2.50 for each operation. An experimental furnace is being constructed at Pére-la-Chaise on the principle of the crematories at Rome and Milan.

THE MUSEUM OF THE ROYAL COLLEGE OF SURGEONS in London has been enriched by the addition of the skeleton of the large St. Bernard dog "Chang," immortalized in *Punch* by his owner, Mr. George du Maurier, by whom he was presented, on his death, in October, 1883.

DEATH OF DR. JOSEPH H. BILL, U.S.A.—Lieutenant-Colonel Joseph H. Bill, Medical Department, United States Army, died on July 21st at Yonkers. He was appointed an assistant surgeon in the army in April, 1860. In March, 1865, he was brevetted Major and Lieutenant-Colonel for faithful and meritorious services during the war, and in the following month was given the full rank of Captain. In July, 1866, he was promoted to be Surgeon, with the rank of Major.

NEW BUILDINGS FOR THE MEDICAL SCHOOL IN PARIS.—The opening of the new buildings called the École Pratique de Médecine, and which form part of the School of Medicine of Paris, occurred on July 14th, the national fête day.

ANOTHER CHOLERA COMMISSION.—Dr. Graham Brown, of Edinburgh, has left for Spain in company with Drs. Roy and Sherrington, with the intention of carrying on further investigations upon the etiology of cholera, and the relation to it of Koch's comma bacillus.

ANOTHER MYDRIATIC, MANDRAGORINE.—M. Crouzel has isolated a body having all the properties of an alkaloid from the mandrake (*Mandragora officinalis*). This body forms a sulphate which is crystalline. A solution of this salt was found to have marked mydriatic effects on the eye of a rabbit.—*L' Union Pharm.*, p. 264.

A MONUMENT TO THUILLIER, a member of the French Cholera Commission in Egypt, who succumbed to the disease while pursuing researches in that country, was formally unveiled recently at the École Normale in Paris, in the presence of the Minister of Public Instruction. M. Pasteur presented the monument in the name of the subscribers, and paid an eloquent tribute to the memory of his former colleague.

JOHN MCCULLOUGH'S INSANITY.—It is as clear as the open day that Mr. McCullough is insane, and he probably has general paresis. There is something very cumbersome and expensive in the legal machinery which requires a commission to sit for a week in order to elicit a plain fact, as has been done in Philadelphia lately.

LIMITING THE NUMBER OF HOURS FOR SHOP-ASSISTANTS AND CLERKS.—A bill has been presented to the British Parliament to regulate the number of hours of work that may be required of shop-assistants and clerks in that country. In 1870 an act was passed by Parliament called the "Factory and Workshops Act," which regulated the work-hours in factories and workshops in which young people are employed. Taking the ground that young persons employed in shops and stores are as much entitled to protection as those others, Sir John Lubbock has introduced the bill referred to above. It has been estimated that the average working week of shop-assistants is from seventy-five to ninety hours.

IS THIS TRUE?—The *Journal of Commerce*, in its issue of July 9th, says: "With all its weakness and indecision the International Sanitary Conference at Rome had sound ideas upon some questions referred to it for judgment. Its adjournment to November next has postponed the official publication of any of the conclusions of the Conference. But the correspondents of several English and Continental journals, who took notes of the proceedings, agree in the statement of one important opinion at which the Conference had arrived. It was decided that the 'disinfection' of merchandise and mails is superfluous.' No exception of rags was made, and the verdict of the Conference was understood by all present to include rags, which are well known and important articles of traffic between countries." If we are correctly informed, the above is, if not a mistake, an extremely misleading statement. We believe that the Technical Committee, whose opinion alone would have any weight, expressly approved of the disinfection of rags.

THE PROGRESS OF THE CHOLERA IN SPAIN.—The number of deaths from cholera in Spain was estimated to be over 10,000 up to July 11th, and over 18,000 up to July 19th, while to-day it is probably not far from 25,000. This mortality represents over 50,000 cases of the disease. The daily number of new cases, as reported, averages about 1,700, with between 600 and 700 deaths. New provinces are being constantly invaded.

THE DEATH-RATE IN THIS CITY, so far this summer, has been below the average. This is due in part to the cool weather which we have had up to the present week, but also to the vigorous work in sanitation which the cholera scare brought about.

AUTOTYPE REPRODUCTION OF HARVEY'S MANUSCRIPT LECTURES.—We gladly take the opportunity to call attention to the efforts which Dr. Edward H. Sieveking is making to secure the publication of an autotype reproduction of Harvey's manuscript lectures. Regarding them, Dr. Sieveking communicates the following interesting facts: "The manuscript of the original lectures delivered at the Royal College of Physicians by William Harvey, including his earliest observations on the Heart and Circulation, and pronounced by him in and after 1616, were re-discovered in the British Museum in 1877. I gave a description of the little book, and exhibited an autotype copy of one page, in my Harveian Oration at the College, in 1877. I then suggested that it would redound to the honor of the present generation, and be an advantage to the history of medicine, if the whole of the lectures could be published in autotype, accompanied by an intelligible transcript. The handwriting is so crabbed and there are so many abbreviations, that no one but an expert could succeed in understanding the lectures. Without the valuable aid of Mr. Bond, now the Chief Librarian of the British Museum, I should have failed in my attempts to understand much, if anything, of the lectures. By dint of much labor, Mr. Bond succeeded in interpreting one of them, and has now been good enough to make me acquainted with a gentleman who is able and willing to transcribe the whole of the lectures. My inquiries led me to suppose that no publisher could be found to undertake the risk of publication, in the form proposed, unless guaranteed a certain amount of professional support. On the other hand, I calculated that if from two to three hundred gentlemen would engage to take one copy each, at the price of not more than two guineas, the work might be safely proceeded with." Any gentlemen who are willing to support the project are requested to send their names to Dr. Sieveking, No. 17 Manchester Square, W., London.

DEATH OF DR. JOHN STAIGE DAVIS.—Dr. John Staige Davis, Professor of Anatomy and Materia Medica at the University of Virginia, died, on July 18th, of paralysis, at Charlottesville. He was born October 1, 1824, in Albemarle County, Va., and was educated at the University of Virginia, from which he was graduated and received his diploma of M.D. in 1841.

THE SAN FRANCISCO CITY AND COUNTY HOSPITAL.—Some weeks ago this hospital was investigated by the Grand Jury with the result of suggesting: *First*, that the time of the visiting physicians will be more profitably spent "in prescribing for the patients," than in lecturing to the students. *Second*, all physical examinations in the presence of students are objectionable. *Third*, the connection between the hospital and the medical schools should be severed. The *Pacific Medical and Surgical Journal* regards these criticisms as eminently narrow and unjust.

THE DEATH OF PROFESSOR PAUL VOGT, of the University of Greifswalde, is announced.

PROFESSOR BAMBERGER has been appointed Rector Magnificus of the University of Vienna.

MR. ERNEST HART, editor of the *British Medical Journal*, is to run for Parliament as a Radical. We learn that he has consented to oppose the enactment of the Contagious Diseases Acts, and as this position is not that taken by the *Journal*, it may lead him to resign. We wish our editorial confrère success in his new venture.—Professor John Eric Erichsen will also seek parliamentary honors at the next election.

THE FRENCH COMMISSION AND FERRÁN'S INOCULATIONS.—The French Commission, under Dr. Brouardel, went to Valencia, but returned very soon. It is reported that they found nothing in Ferrán's methods worthy of scientific research.

THE INTERNATIONAL MEDICAL CONGRESS.—Dr. Oliver Wendell Holmes, Dr. William H. Baker, Dr. Cheever, Dr. James C. White, Dr. William F. Whitney, of Boston; Dr. E. P. Hurd, from Newburyport, and members from Concord, N. H.; Portland, Me.; and Lowell, Mass., have resigned from membership in the Congress. The physicians of this city belonging to the State Association have held a meeting and proffered a plan for a compromise to the Executive Committee. This plan is substantially that of allowing only Old Code physicians to become delegates, with power to vote, while New Code physicians will be permitted to become members with power to contribute papers, but not to vote. This is virtually no compromise, since no self-respecting physician would accept membership or do work under such conditions.

TESTIMONY TO THE MORAL EFFECT OF CHOLERA VACCINATION.—A contribution regarding the cholera in Spain, addressed to the American Minister at Paris by Dr. W. E. Johnson, has been received at the office of the National Board of Health through the Department of State. Under date of June 13th, Dr. Johnson writes: "A circumstance which has up to the present moment given a great feeling of security in regard to the disease is the fact that both in Spain and France the mass of the people, the peasants and all the poorer classes, have adopted with a perfect confidence and with great enthusiasm the theory of inoculation proposed by the Spanish surgeon, Ferrán. The very classes of people, fortunately, who are the most exposed by their habits of life to the ravages of the epidemic are those who have seized upon the new idea with the greatest ardor. . . . The idea that a cure, or, more properly speaking, a prophylactic to the disease has been discovered is contributing largely to its non-extension by the greater feeling of security it gives, by the more elevated moral tone it creates, and by the absence of that general and most fatal demoralization which seizes upon the people of infected or threatened localities, and abstracts from them one-half of their vitality before being struck by the dreaded malady. For these reasons there is a more cheerful, and especially a more healthful, indifference in regard to the epidemic than has ever before been observed. But the municipal authorities, fortunately, are none the less zealous on that account in enforcing the necessary sanitary measures for combating the extension of the disease."

Reports of Societies.

THE PRACTITIONERS' SOCIETY OF NEW YORK.

Stated Meeting, May 1, 1885.

A. Brayton Ball, M.D., President, in the Chair.

HEARING BETTER IN A NOISE.

Dr. Samuel Sexton related the history of a patient whom he expected to show to the members, but the inclemency of the weather had prevented his presence. The case began as a destructive inflammation of both ears from scarlet fever, while the patient was but seven years of age. In his youth he was quite deaf, but hearing began to return as he grew up to manhood. Finally he went as fireman on a railroad locomotive, and advanced to the position of engineer. For many years he ran an engine without there being any complaints made, and without regarding himself as deaf. But when the custom was introduced of examining railroad employés regarding their ability to hear well, he was dismissed. Being thus thrown out of employment, and having nothing to do, he drifted into the Eye and Ear Infirmary. On examination Dr. Sexton found that he could not hear a loud voice at a distance of only a few feet, and was unable to understand anything which was said to him. But he made the statement that when on an engine in motion he could hear everything; could hear better than the fireman, whose hearing was normal. But the moment he got off the train and went to the company's office, he could hear nothing that was said to him.

The point of particular interest in the case was that which raised the question whether these people could be benefited by artificial drum-heads to such an extent as to enable them to continue their vocation. He introduced an artificial drum-head into one ear of this patient, and much to his surprise the man was immediately able to hear ordinary convervation. The next time he returned to the dispensary, the man had obtained a place as stationary engineer. A drum-head was then placed into the other ear, and he was enabled to hear with that ear also.

Of course it was not in every case of deafness that an artificial drum-head would prove of benefit; indeed, the cases were few in which persons would be enabled by this means to continue their occupation, where it was necessary to hear well. It was only in cases in which the drum-head partially remained that such a device was of service.

Dr. Walker asked whether the drum-head was usually lost in cases where a man was able to hear better in a noise.

Dr. Sexton replied, not at all; in the greater number of cases of chronic catarrhal inflammation the drum-head remained. Where a patient heard better in a noise, the drum-head usually was present, but it was very loose; the equilibrium having been lost, there was consequent defect in the transmitting mechanism. In such cases, low vibrations, such as were experienced in a carriage or railroad train, drove the drum-head in, brought the ossicles close together, other sounds were taken up, and the subject was able to hear very well. In the case related, only the upper segment of the drum-head was present, which failed to drive the ossicles in except during the presence of strong vibrations.

A discussion was then opened on

THE COMPLICATIONS AND SEQUELÆ OF SCARLET FEVER.

Dr. Kinnicutt opened the discussion by referring to a

PERSISTENT ELEVATION OF TEMPERATURE IN SCARLET FEVER.

The speaker had mentioned at a previous meeting of the Society that he had frequently observed, in *apparently* uncomplicated cases of scarlet fever, the persistence of a slight degree of pyrexia into and even to the end of the third week. The pyrexia might amount to no more than a degree or a degree and a half in the afternoon, with a normal morning temperature often. The morbific action of the scarlet fever poison evidently was not exhausted, and it behooved us in such cases to make frequent and thorough examinations of our patients. The serous membranes, in his experience, were structures often involved after the more palpable signs of the disease had disappeared, even during apparent convalescence; and of these, the articular synovial membranes and the endocardium most commonly. It was unnecessary before this Society to insist upon the great frequency with which the former were affected; nevertheless it was a pathological condition not sufficiently well recognized by physicians. The explanation was simple; inflammations of the articular synovial membranes in scarlet fever in children, as a rule, were unattended with swelling, redness, or spontaneous pain; the sole symptom often was pain on movement of the joint.

Dr. Kinnicutt believed that the endocardium was involved more frequently than was commonly supposed. In his daily examinations he had frequently detected an impurity of one or another heart-sound, not infrequently a soft, but distinct murmur. Undoubtedly in many cases the murmur should be regarded as hæmic in origin or due to a temporary dilatation, nevertheless such a sign in the course of scarlet fever always should be received with suspicion. It was probable that such an endocarditis might disappear leaving no traces behind it, yet it was important to bear in mind that it might well lay the foundation for future chronic cardiac disease.

Occasionally he had been able to keep under observation such cases as he had described for a number of years, and had seen valvular disease develop. He believed that many cases of heart-disease in children and adult life might thus be explained. Dr. Kinnicutt was not disposed to regard the joint symptoms as *truly rheumatic* in nature, rather as inflammations of serous membranes dependent upon the action of the specific scarlet fever poison. In conclusion, he stated that, where pleuritis and pericarditis with effusion were developed, there was a marked tendency to rapid purulent change.

The President had been very much interested in what Dr. Kinnicutt had said regarding the cardiac symptoms of scarlet fever, and concurred with him in the belief that they should always excite strong suspicion of their being of rheumatic origin, but he did not think that we should necessarily take an unfavorable view of such cases as we were sometimes tempted to do, and to give a very unfavorable prognosis. In the last case of scarlet fever which he had seen there was well-marked joint rheumatism, accompanied by apparent endocarditis; that is, there was a very well-marked mitral systolic murmur, and the pulsations of the heart were somewhat irregular and rapid, beating from 120 to 130 per minute during ten days or two weeks. There was not much elevation of the temperature. Dr. Ball felt uneasy about the case, but was inclined to take the view that the murmur was anæmic, for the reason that it had come on after the boy had been very ill with scarlet fever for two weeks, and was much prostrated from the disease. Percussion showed the heart to be larger than normal, and he thought there was possible dilatation of the left ventricle, allowing reflux through the mitral valves. In the course of a month after recovery, the cardiac murmur disappeared entirely, and the heart returned to its natural size.

LONG CONTINUED RAPIDITY OF HEART ACTION.

Dr. Simon Baruch, by invitation, related the history of a case of scarlet fever with a complication which, so far as as he was informed, was novel. The patient was a merchant, thirty-five years of age, who had always been in perfect health until two or three days before Dr. Baruch saw him, which was on the 5th of April. At that time the temperature was 103° F.; the pulse, 140. At 9 P.M. the pulse was 150. April 6, 12.30 P.M., temperature, 104.5° F.; pulse, 150. Half a drachm of antipyrin

was administered. At 2.15 P.M., temperature, 101° F.; pulse, 150. At 3.30 P.M., temperature, 101° F.; three drops of fluid extract of digitalis administered. 5.40 P.M., temperature, 102° F.; pulse, 150. At 6 P.M. half a drachm of antipyrin given under misapprehension of instructions. 7 P.M., temperature, 101° F.; pulse, 150. Brandy was given, and more digitalis. April 7th, 4 A.M., pulse, 150. Digitalis, four drops, and brandy administered. At 7 A.M., temperature, 102.5° F.; pulse, 150. Antipyrin, thirty grains; at 7.30 A.M., digitalis, five drops. 11.30 A.M., temperature, 102° F.; pulse, 150. There had been no effect evidently from the antipyrin. At 2 P.M. a consultation was held with Dr. A. Jacobi, and on account of the continued high pulse-rate an unfavorable prognosis was made. In the course of the afternoon several large doses of caffein were given hypodermically and in capsule, and brandy freely administered. At 5.30 P.M., the pulse 150; and at 7.30 P.M. the pulse 140; temperature, 102° F. Infusion of digitalis was administered in half a tablespoonful doses, and alternated half hourly with camphor, caffein, and brandy. At 9.30 P.M., temperature, 102° F.; pulse, 130. Pulse-rate increased during the evening, until at midnight Dr. Baruch's assistant, who had remained with the patient, found the pulse 180, barely to be counted, and called Dr. Baruch, who at 12.30 A.M., April 8th, found the pulse 140. Caffein and digitalis were discontinued; half an ounce of brandy with milk was given and later a hypodermic injection of morphine. At 12 M., April 9, temperature, 101° F.; pulse, 130. Half an hour later the pulse was 120. He had taken neither caffein nor digitalis, and only small quantities of brandy and camphor. At 9.30 P.M., temperature, 100.8° F.; pulse, 128. April 10, 7 A.M., temperature, 101° F.; pulse, 114; at 11.30 A.M., temperature 100.5° F.; pulse, 108. April 11, 3 A.M., pulse, 98; temperature, 99° F.

Dr. Baruch regarded the pulse-rate in this case as phenomenal because there were no other symptoms indicating the extreme gravity of the case which would be inferred from the condition of the heart. There was a full and free eruption, but no severe angina. The sensorium was clear throughout. The temperature was not especially high. The patient took from three to six quarts of milk every twenty-four hours, besides his brandy. The rapid pulse was not due to heart-failure, because it occurred at the outset of the disease in a man who was in perfect health on the day immediately preceding the invasion. Moreover, both sounds of the heart were clear and distinct even when the pulse was 160; this in itself is a remarkable phenomenon in my experience. Indeed, recovery of a man after exhibiting repeatedly a pulse-rate of 160 has never occurred to me before. The rapidity of the pulse was independent of the height of pyrexia; it was present with a temperature of 101° F. or 104.5° F., whether the temperature was reduced by antipyrin or fell spontaneously, and it continued until the natural decline of the disease, even during the early days of desquamation.

I regard the phenomenon as an effect of the scarlatinal poison expending its intensity upon the vagus and inhibiting its action. This inhibition continued, being but slightly, if at all, influenced by remedies until the exanthema began to decline, and it continued in operation when the temperature was almost normal. When the patient was quite comfortable, taking six quarts of milk daily and demanding more food, when the temperature was 99° F., just after desquamation had begun, the pulse continued at about 100. Yesterday it was 80, after considerable exercise, the patient having visited my office without permission.

DR. SEXTON inquired as to how much brandy the patient had taken.

DR. BARUCH said a moderate amount of brandy had been given before he saw the patient, and thinking that might have had something to do with causing the rapid pulse-rate, it was stopped for awhile, but no effect was noticed upon the pulse.

DR. KINNICUTT thought it would have been interesting had the effect of hypodermic injections of convallaria been tried in such a case. He had found that convallaria acted better in such cases than any other form of cardiac stimulant which he had used; certainly better than digitalis, although he did not regard it in general nearly as efficient a heart tonic. It seemed to him that in cases in which there was present an inhibitory action of the vagus, convallaria was the most effective means of controlling it. Cases had been reported at this Society in which hypodermic injections of convallaria had controlled rapidity of heart action, 160 per minute, after digitalis and other purely heart tonics had failed. Drs. Peabody and Polk reported cases illustrating the beneficial action of convallaria in increased rapidity of heart action in other cases than acute disease.

DR. DANA asked whether the man had ever before had any cardiac affection.

DR. BARUCH replied that he had never before been sick.

DIPHTHERIA COMPLICATING SCARLET FEVER.

DR. BARUCH said that formerly he was inclined to regard diphtheria as rather a common complication of scarlet fever, much more so than it really is. The mistake which he formerly made, and which many probably made, was due to lack of thorough study of supposed cases of diphtheritic complication of scarlet fever. Although he did not doubt the occurrence of diphtheria as a complication, he had not seen a case of post-diphtheritic paralysis. It is important to distinguish true diphtheria from the ordinary angina of scarlet fever. The latter is a necrotic process; the former is not. In cases in which he was unable to find false membrane upon the velum and the pillars of the fauces, or albumen in the urine, he was unwilling to make a diagnosis of diphtheritic complication. The muco-purulent deposits of scarlet fever looked very much like the deposits of diphtheria, and were often mistakenly regarded as such, leading us to make a much more serious prognosis. Only three weeks ago a young man of twenty-one years came to his dispensary class with sore throat, which, on examination, was found to be sore throat of scarlet fever. A child of twelve years was brought on the same day, the trouble being found to be scarlet fever, which had not been suspected.

EAR-COMPLICATIONS OF SCARLET FEVER.

DR. BARUCH had of late years made more or less a special study of throat and ear disease, and had come to the conclusion that the throat affection in scarlet fever, because of its liability to extend into the Eustachian tube, should receive much more energetic treatment than was usually given it. He also thought that a good many cases of naso-pharyngeal catarrh and chronic follicular tonsillitis arose from scarlet fever. Dr. Baruch treated the cases by the free use of antiseptics and cleansing methods, by ice-bags to the throat, and by tinctura ferri internally, thus guarding against future throat trouble. He had been a general practitioner for fifteen years before he had studied the ear and throat specially, and during that time had given, as he believed general practitioners usually gave, too little attention to the recognition of the early stages of inflammation of the middle ear in scarlet fever. Such a complication often escaped the physician's notice, because it was apt to occur during the desquamating period, when the physician had ceased regular attendance. Besides, the general public was apt to regard a discharge from the ear after scarlet fever as a favorable sign, and did not consult a physician for that reason. Finally the patient entered an institution, or consulted a specialist for treatment of the chronic affection. It has been ascertained by statistics, that ten per cent. of the cases of deaf-mutism were traceable to scarlet fever. This fact, combined with the long suffering inflicted by chronic suppuration of the ear, should cause us to be

constantly on the alert for complications in scarlet fever. If during the desquamating process (it occurs usually in the early days of this period of scarlet fever) the child complained a little of earache, or if there was a slight rise of temperature, our attention should be directed to the ear, and if, by touching the mastoid process or the helix, it is ascertained that pain is present, the drum should be examined. If acute catarrh is found to exist, it should be treated energetically. He thought applications of warm water into the ear, not by syringe, but by pouring from the spout of a tea-kettle or low irrigator, very useful. The throat should again be looked after, and thoroughly cleansed by antiseptics. Even the application of leeches becomes necessary, for the slight loss of blood would not endanger the patient's condition, while the integrity of the ear is all-important.

With reference to the sequelæ he had found a form of anasarca, not due to implication of the kidneys, not infrequent. There was no albumen in the urine, nor microscopic elements pointing to renal complication; the dropsy was not accompanied by ascites, the abdominal cavity usually being free. He supposed it to be an œdema due to protracted disease, the heart having been working hard, with perhaps some degree of failure. He had seen this form of anasarca often after long protracted malarial fever, even when there was no infarction of the liver to account for it. The treatment indicated was iron and hygienic tonics. It is important to differentiate this form of dropsy from the ordinary post-scarlatinal, on account of the difference in prognosis.

Dr. Baruch further added, regarding the chronic inflammations of the ear following scarlet fever, that they had always proven very rebellious until he had adopted the dry antiseptic method; the canal was syringed with warm water, dried with cotton, and packed with finely powdered boracic acid. The frequent use of the syringe he regarded as harmful, even in cases of six months' standing, or longer, in which there was no organic disease of the bones of the ear. He has seen the condition disappear rapidly under this form of treatment.

ABSENCE OF NERVOUS COMPLICATIONS OF SCARLET FEVER.

Dr. Dana said that his contribution to the subject under discussion would be rather of a negative character. Scarlet fever, so far as his observation went, was a disease characterized by absence of nervous sequelæ. In looking over the notes of about three hundred and forty cases of nervous disease of all kinds, occurring in children, which had appeared at his clinic during the last three or four years, he could find only one case of nervous trouble which seemed to be a sequela of scarlet fever; it was a case of chorea occurring in a boy of only partial mental development, and there was some doubt whether the attack of scarlet fever had had much to do in causing the nervous affection. Perhaps it precipitated the choreic trouble in a child who had originally of a neuropathic tendency. The experience of other neurologists he believed to be about the same. In looking over cases of infantile spinal paralysis, he found that in seventy-five tabulated cases only two were put down as having had scarlet fever. Most authorities said there was no paralysis after scarlet fever, or at least no good evidence was given of paralysis produced by that disease. His observation was like that of Dr. Baruch, namely, that diphtheritic sore throat was very rarely a complication of scarlet fever, for the diphtheritic paralysis very seldom followed scarlet fever. Bonn says he has seen, as have other observers, paralysis of the throat only very rarely after scarlet fever, and he has never seen any of the other forms of paralysis, such as occur after diphtheria. Dr. Dana was inclined to lay down, as a fundamental rule, that the infectious poison of scarlet fever does not cause the neuritis or myelitis which is observed as an effect of the poison of diphtheria.

Some exception might be taken as regarded epilepsy. Gowers found 19 cases (among 1,450) in which recurring epileptic convulsions occurred after scarlet fever. Of these uræmic poisoning could be excluded in 14 cases. The possibility of meningitis, however, is not alluded to. Dr. H. A. Wildermuth has also very recently in *Der Irrenfreund*, reported cases in point. Among one hundred and eighty-seven epileptics, the exciting cause of the disease in twelve cases was scarlet fever, but of these twelve, in six there were evidences of a leptomeningitis, of the convexity, in five there was albuminuria, and in three of these the convulsions were evidently uræmic, for they did not recur after cure of the renal trouble. Dr. Wildermuth, in opposition to Gowers, comes to the conclusion that the specific poison of scarlatina does not itself directly excite epilepsy. This was Dr. Dana's view also.

Dr. Kinnicutt said his experience had been similar to that of Dr. Dana and Dr. Baruch; he had never seen any nervous symptoms except in cases in which there was undoubted diphtheritic complication.

The President asked Dr. Baruch how he distinguished the membrane of diphtheria from the appearance of the scarlatinal sore throat.

Dr. Baruch said he paid less attention to the appearance of the membrane than to the other symptoms present. He thought the membrane in the two conditions had much the same appearance; but in the sore throat of scarlet fever the soreness was much more marked; there was more difficulty in swallowing, and the local symptoms were more intense, because there was destruction of the epithelium going on. Again, in the diphtheritic complication the membrane was not confined alone to the lateral portion of the pharynx and tonsils; it also existed on the posterior pharynx, velum, and pillars. If it occurred upon the velum he should feel quite sure that it was diphtheritic. In addition he should examine the urine.

The President asked if the diphtheritic membrane was not much more adherent than the pultaceous membrane of scarlet fever. Then again, the false membrane was usually in isolated patches.

Dr. Baruch thought the contrast would hold good between the diphtheritic membrane and the peculiar secretion which oozed out of the follicles in scarlet fever. The latter was much more easily removed. But the mucopurulent discharge which occurred upon the ulcerated surface in scarlet fever is pretty hard to remove—quite as difficult to remove as the diphtheritic membrane. He did not think the difficulty of removal of the membrane would be a diagnostic element of itself.

The President regarded diphtheria as a rare complication of scarlet fever, and agreed with Dr. Baruch in not regarding the false membrane described by Dr. Baruch (as belonging to uncomplicated scarlet fever) as diphtheritic at all.

Dr. Beverley Robinson said that the complication which he had personally observed most frequently in scarlet fever was otitis and perforation of the drum-head. But then he had not seen a very large number of serious cases of scarlet fever. He had not often seen diphtheritic complications, not oftener than once or twice. He had seen three or four cases of perforation of the drum-head, and although he had been fully alive to the possibility of the accident, and its importance, yet there were no symptoms which enabled him to recognize the otitis until perforation had occurred. For his part he believed that perforation of the drum-head could not always be prevented, and this statement was true not only of scarlet fever, but also of diphtheria. The only prevention, if it could be called such, was to perforate the drum-head so that the matter could escape, should it accumulate, without spontaneous rupture.

Dr. Kinnicut asked Dr. Sexton if he would approve of the early performance of paracentesis in such cases.

Dr. Sexton replied that he had not practised it, and should regard it as an uncalled for procedure except under very limited circumstances.

Dr. Kinnicutt said that one of his patients had had scar-

let fever and, on complaining of trouble in the ear, a friend advised paracentesis within two hours after the first symptom. Relief was instantaneous after the operation. This occurred at about the end of the first week of the fever.

DR. SEXTON said he could understand that where the drum-head is thickened, as it may be from previous inflammation, immediate relief may follow perforation, but there are many cases in which the inflammation is not confined to the tympanic cavity proper. The membrana tympani and the membrana flaccidi were two quite different things; where there was much bulging in either perforation was sometimes necessary, and might give prompt relief. But the membrana tympani very seldom called for such a procedure.

DR. KINNICUTT asked Dr. Sexton whether any particular form of treatment was indicated to prevent the ear complication.

DR. SEXTON thought that in nearly all cases of scarlet fever one would find on examining the ear that there was a catarrhal inflammation of the membrane lining the drum-head during the existence of the throat trouble, but it does not always proceed to suppuration. The mucus, if in excess, may escape through the Eustachian tube, which is of large size in children. Unless there are special symptoms, attention is not directed to the ear, but if there is a suppurating tendency he would not hesitate to give very small doses of calcium sulphide to the child. He never failed to get benefit from that.

DR. KINNICUTT. With local applications?

DR. SEXTON. Without local applications. I think it quite hazardous to make local applications. One cannot be too careful in syringing the ear. The water is liable to increase the irritation. Where there was a simple, non-irritating discharge, Dr. Sexton found but little trouble in cleansing the ear. If the discharge were purulent and irritating, he used cotton-wool. The treatment would vary with the age of the patient. In very young children, in whom the drum-head is difficult to find, very little can be done in the way of making an examination. After puberty the pneumatic cells take to form in the mastoid, and the complications were likely to be different. Dentition was often going on in scarlet fever, and was liable to predispose to ear-trouble by sympathetic hyperæmia. He would like to hear the experience of the members concerning meningitis as a complication of scarlet fever, which he believed was regarded as an extension of disease from the ear.

DR. BARUCH asked Dr. Sexton whether he would use Politzer's method early in this class of cases.

DR. SEXTON replied that ne never used it in the early stage.

DR. BARUCH asked how soon he would employ it after perforation of the drum-head.

DR. SEXTON said one should be very careful in its use. It should not be employed too freely through fear of interfering with the healing of the drum-head. After the membrane had healed and there was possible danger of its becoming adherent to the walls, it might be used, but very carefully, through fear of again producing rupture.

DR BARUCH asked if it was not important to keep the tube clear.

DR. SEXTON said it was desirable to keep the tube clear, but this was not assured by the use of the air douche, and where there was perforation of the drum-head there was usually free drainage.

DR. DANA asked Dr. Sexton if careful treatment of the throat difficulty would prevent implication of the ear.

DR. SEXTON replied that the throat and ear trouble almost always occurred simultaneously. Dr. Sexton further stated that in many cases of ear trouble, which the patients attributed to scarlet fever, close questioning brought out the fact that it did not occur at the time of the exanthem at all, but was independent of it. Then there were chronic cases of ear disease following an acute otorrhœa which had not been recognized because of the patient's youth. Such cases were liable to be called cases of congenital deaf-mutism.

DR. R. F. WEIR had several years ago made a special study of ear affections, during which time he saw a good many cases of aural disease following the exanthemata, and he could corroborate the statement of Dr. Robinson, that it was very difficult to recognize the ear trouble in these children before perforation took place. Besides, in a child under five years of age, it was very difficult to make an examination of the ear which would enable one to pronounce a positive diagnosis. Another fact which made the examination difficult was the liability to extension of the inflammation to the external ear. He had therefore been unable to carry out his ideas as to the propriety of paracentesis in these cases, oftener than once or twice, and on those occasions there had been considerable distress present. It was very difficult to perforate the drum-head in these cases. It was a haphazard operation. Suppuration of the middle ear in the young suffering from scarlet fever, if properly treated, resulted in the majority of cases in a satisfactory cure.

DR. WEIR, DR. BARUCH, and DR. KINNICUTT had relieved pain in the ear by the use of a solution of cocaine. Dr. Kinnicutt spoke of a case in which a drop or two was supposed to have come in contact with the external canal and produced inflammation.

DR. ROBINSON asked the experience of the Society with regard to the value of cold affusions as a means of lowering excessive temperature accompanied by nervous excitement in scarlet fever.

DR. KINNICUTT had used cold affusions and found marked benefit therefrom. Dr. Buck had reported a case in which cold affusions failed to lower the temperature, while hot affusions immediately produced the desired effect and also ameliorated other symptoms. Dr. Kinnicutt would at present prefer to use one of the new antipyretics, especially antipyrin, for they produced all the good effects of cold without any of its unpleasant ones. In one case, in which the temperature rose to 107° F., and there was every indication of approaching death, rectal injections of antipyrin produced most marked beneficial results, and the patient finally recovered.

The Society went into executive session.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting May 27, 1885.

JOHN A. WYETH, M.D., PRESIDENT, IN THE CHAIR.

DR. R. W. WILCOX presented specimens of

MULTILOCULAR CYSTOMA OF THE RIGHT OVARY WITH HYDROSALPINX, ALSO CYSTIC DEGENERATION OF THE LEFT OVARY WITH SIMPLE SALPINGITIS.

The patient was thirty-seven years old, married, never pregnant. For the last fifteen years she had noticed an enlargement of the abdomen; for the last two years her size made locomotion very difficult. Her physician during all this time had considered it to be a case of abdominal dropsy, and of late had been prescribing diuretics. His attention had been called to the fact that an ovarian tumor was present, but he denied its existence, and stated, even if there were one, his medicines would speedily produce absorption. The patient came under observation in February of this year, suffering from two distinct diseases: a peritonitis extending over the epigastric, right and left hypochondriac and right lumbar region, also an acute nephritis, due to the excessive administration of diuretics. As for the tumor, there was no difficulty whatever in diagnosis; it hardly seemed possible that it could have been overlooked by anyone possessing medical knowledge. The diuretics being withdrawn, the nephritis subsided; the peritonitis resulted in adhesions between the tumor and the abdominal wall.

Dr. T. G. Thomas performed ovariotomy and removed

the specimens shown. The larger one consists of the sac, from which the fluid has been removed. The weight of the tumor was 45¾ lbs.; the sac weighs a little over 3 lbs. The fluid was of the ordinary "flax-seed tea" variety, containing considerable diffused blood and a great number of cholesterine crystals. The secondary cysts are mostly small, and contain clear fluid. Over the anterior surface is seen the roughened area marking the site of the adhesions. The Fallopian tube is elongated and hypertrophied, the distal extremity adherent to the tumor; the lumen at the uterine end is occluded. The tube was distended with a clear yellow fluid.

The smaller specimen is the left ovary and tube. The ovary has undergone cystic degeneration, some of the cysts being deep in the substance of the organ, and there seems to be more than the usual amount of fibrous tissue. There are also seen bands of adhesion between the tube and ovary. In the fresh state it showed most beautifully a *corpus luteum* of menstruation, which occurred about ten days before the operation. The tube was very hyperæmic and slightly distended with a clear fluid.

EPITHELIOMA OF THE TONGUE.

DR. C. W. KNIGHT presented a specimen which he removed at the Manhattan Eye and Ear Hospital after ligation of the lingual artery. It consisted of a portion of the posterior part of the tongue of a patient sixty years of age, who had had symptoms for more than nine months, but did not suspect the nature of the trouble until about two months later. During the last four months the patient had suffered from severe pain, which extended into the ear, but during the last few weeks he had been made comparatively comfortable by the local use of cocaine. The specimen was referred to the Committee on Microscopy.

LIPOMA OF THE BACK.

DR. L. WALDSTEIN presented a lipoma which was chiefly interesting from the fact that it was removed from the back of a woman eighty-six years of age, and showed the degenerative process which might or might not be attributed to a general atheromatous condition of the arteries. The operation was performed by Dr. Lange because of an ulcer of the skin which would not heal and gave rise to pain and other disagreeable symptoms. The wound healed by first intention. The patient was extremely emaciated, and in this there was illustrated the fact that those in whom emaciation goes to a high degree lipomas develop and do not appreciably diminish in size.

Dr. Waldstein called attention especially to the peculiar degeneration of a part of the tumor, in which there was evidently a formation of new connective tissue, with which could be seen small foci, larger ones in other places, and in some instances they had assumed the character of cysts containing putty-like material which had been proved to be a peculiar form of fat, the melting-point of which was higher than that of ordinary adipose tissue.

Dr. Waldstein also presented a specimen of

ADENO-CARCINOMA OF THE STOMACH.

It was of the form not found very frequently; of the diffuse variety, where the greater part of the new formation was not found in the pylorus, which was patent, but existed as a fungoid mass in the mucous membrane toward the cardia and fundus. The patient was a man forty-six years of age, who had suffered extremely until within the last three or four months. Previous to that time the symptoms were of an indefinite, obscure nature. The carcinomatous tissue had evidently grown very rapidly, as was demonstrated by the great quantity and also by the karyokinetic cell division. There were also found great quantities of small bodies which might have been mistaken for micro-organisms. Dr. Waldstein directed attention to this point for the reason that this granular detritus from division of the nuclei had in some instances been mistaken for micro-organisms. The case was specially interesting because near the edge of the carcinomatous mass could be seen small foci of the disease just beginning to develop. Microscopically it had the distinctive character of adeno-carcinoma, which is extremely malignant.

There was also extreme jaundice, and at the junction of the lower border of the ribs with the right mammary line was a tumor about the size of a pigeon's egg, which was mistaken for carcinoma of the liver, and which on autopsy proved to be an enlarged bladder caused by metastatic tumors of the lomphatic glands in the porta hepatis pressing against the bile-ducts, but not sufficiently to cause complete obstruction, as there was bile coloring-matter present in the duodenum, and also bile coloring-matter was found in the fecal discharges during life.

DIPHTHERIA—LARYNGEAL STENOSIS—CONGESTION OF THE LUNGS.

DR. JOSEPH E. WINTERS, by invitation, presented a specimen consisting of the lungs removed from a child one year and eight months old, in whom the first symptoms of illness appeared on a Sunday, when it had a convulsion. The patient was not seen by a physician, nor did it have treatment of any kind, until the Friday following, when the child was brought to the Demilt Dispensary, where Dr. Winters made an examination and found that it had extensive diphtheria, involving all the faucial surface pillars of the soft palate, the tonsils, and a considerable portion of the posterior wall of the pharynx. The exudate was very thick and very tough. The child was kept in bed and was put upon the usual treatment, and went along very well until the following Wednesday. On Wednesday night there was a wake in the house, and during that night and the following day the child was very much neglected. On Thursday night the child began to have a little croupy cough, and on Friday for the first time the diagnosis of pseudo-membranous laryngitis was made, and was based entirely upon the character of the cough. There was no interference with respiration, the breathing was quiet, and the child was not apparently very ill. On Saturday and Sunday the child was very comfortable. On Sunday night serious interference with respiration developed, and tracheotomy was thought of, but was not performed because the father of the child objected. On Monday again the child was very comfortable; breathing was easy, and there was no obstruction apparently to respiration. On Monday night symptoms of obstruction to respiration again came on and continued from 10.30 P.M. to 2 A.M. Tuesday morning, when the child died from exhaustion and asphyxia.

The condition of the parts was somewhat influenced by treatment probably, as the child took large quantities of ipecac and tartar emetic, and there was a good deal of vomiting.

At the autopsy the lungs filled the thorax well. There was a little exudation upon the tonsils. The upper portion of the larynx was nearly free from disease, and very little of pseudo-membrane was encountered until they reached below the vocal chords, and from there, for a distance of three-fourths of an inch along the trachea, there was a good deal of exudation, and below that point muco-pus and vascularization were distinct, but no recognizable pseudo-membrane. The anterior surface of the lungs was somewhat more distended than usual, and apparently the air-cells were more distinct than they were usually seen. On the posterior surface the bases and the roots of the lungs were congested. On section muco-pus flowed from all, even the smallest, bronchi. At the bases of the lungs there still existed an unusual vascularity. In the anterior portion there was some anæmia with unusual distention. Sections had been made from the lungs, but there had not yet been time for a microscropic examination.

DR. C. C. LEE asked Dr. Winters concerning his ex-

perience in the use of Dr. Joseph L. Dwyer's laryngeal tube.

Dr. Winters said that he had had no experience in the use of the tube; since it had been discarded so completely by French surgeons he had not endeavored to employ it.

Dr. Lee remarked that that was just as to the tubes used in Paris, but not quite just to the tubes used in this city, where they had arrested the progress of the spasmodic disease to such an extent, after other measures had failed, that lives had been saved which he thought would have been sacrificed had laryngotomy been performed. He could not say that by treating diphtheritic laryngitis life had been saved, but he thought such tubes were useful, and might with very great propriety be employed in such cases as Dr. Winters had mentioned, where objections, such as could not be overcome, had been raised to the performance of tracheotomy.

Dr. Winters said he was not at all familiar with the treatment adopted by Dr. Dwyer, and had not seen Dr. Dwyer's tube; but he had supposed that its use had been limited to laryngeal complication, occurring in measles, and had not heard of its being used in laryngeal diphtheria.

Dr. Northrup said that, in the New York Foundling Asylum, where urgent laryngeal symptoms had been present the tube had relieved them almost immediately, and that after death membrane was found to extend from the epiglottis to the finest bronchi. Of course, it was hopeless to attempt to cure such cases by relieving laryngeal dyspnœa, but the tube had thus far met the indications promptly and completely.

Dr. Lee said he did not raise the question on the supposition that the use of the tube in diphtheritic laryngitis would be curative, although there had been notice in print of its use in two or three cases, which were believed to be croupous laryngitis.

Dr. Northrup asked Dr. Winters if, in his experience during the past season, the pseudo-membrane had manifested a marked tendency to spread downward into the bronchi.

Dr. Winters said it had not been his experience. The cases of croup which he had seen had been mostly in consultation, and, according to his experience in diphtheritic croup, in the cases which were treated early the membrane did not extend very far below the larynx. He thought that by proper care, instituted very early in practice outside of public institutions, the spread of the exudation and formation of pseudo-membrane to very much distance below the larynx could be, as a rule, prevented. He thought that the character of the exudation itself would be modified, and its tendency to spread would be greater in foundling asylums than it would be in outside practice.

Dr. Boldt said that his experience had been the same in private practice as that which Dr. Northrup had seen in hospital practice—namely, that in the majority of cases diphtheria had, during the past season, manifested a tendency to spread into the bronchial tubes. Furthermore, where tracheotomy had been performed this winter the cases had proved invariably fatal, and in autopsies which he had made, in eight cases after tracheotomy, there was seen in each one membrane extending into the bronchi. He did not believe that the extension of the membrane could be prevented in every case, but probably a good deal could be done to restrain its progress somewhat.

Dr. J. C. Peters had seen false membrane upon the top of the larynx without extension downward, and the patient recovered with frequent irrigation of the throat and the use of bichloride of mercury dry upon the tongue, where it comes in contact with the pharynx and top of the larynx.

(To be continued.)

Compressed Tablets of Vaccini Lymph are manufactured and successfully used in Switzerland.

Correspondence.

AN UNPLEASANT ACCOMPLISHMENT.

To the Editor of The Medical Record.

Sir: I have encountered a phenomenon here which seems worth recording. There resides here a young man twenty-eight years old, who represents a large Eastern clothing house, and who does an extensive business for his firm by taking orders for men's suits, for which he makes the necessary measurements. He possesses the singular power of making many of his customers quite sick during the process of measuring. He proceeds very carefully and deliberately, with a painstaking that insures ultimate satisfaction to his patrons.

Quite early in the process it is not uncommon for the customer to become very sick, so that he has to lie down and then evinces the signs of extreme prostration and faintness.

In perhaps twenty-five per cent. of the cases complete syncope occurs. The young man says that he has probably "floored" fully one hundred persons in the last two or three years, some of them being large and wholly robust. The trouble occurs early in the measurement and generally while he is adjusting rule and tape to neck, shoulders, and arms, especially when one arm is extended horizontally, and one of his hands is at the customer's neck, and the other at the wrist. It has commonly occurred to persons who knew nothing about his rather annoying accomplishment, and hence were not in expectant mood, and always long before the subject could have become fatigued.

He also says that these peculiar events come in waves; he may go a month or more without discommoding a single patron, and then have a series of cases in a few days. Recently he "floored" three men in succession within an hour, without their knowing of each other's condition. He says that he is conscious of some unusual state of his nervous system at such times, and feels a tingling much as if an electric current were passing through his arms.

He attributes this unpleasant influence over his customers to electric action, and it may be remarked here that he can at any time develop electricity in the familiar way—but with uncommon facility—by shuffling over the carpet, and administer brisk shocks to his friends. He is in vigorous health and well nourished, of only moderately nervous temperament, a good singer, and very earnest, zealous, and successful in his business.

I may add that he always seems to be standing behind the customer at the stage of measuring when the depressing influence is exerted.

Yours respectfully,

Francis H. Atkins, S.B., M.D.

Las Vegas, New Mexico,
June 12, 1885.

Transplantation of an Eye.—Homer's ox-eyed goddesses are in danger of becoming very commonplace mortals. Dr. Chilbert was recently called upon to enucleate the eye of a young girl, and, with a due regard to her beauty, secured a rabbit's eye, which he inserted into the empty orbit. He reported the case to the Académie de Médecine with the remark that "at the present writing all goes well." But he omitted to state whether the young lady could see with her rabbit's eye, or whether it was simply an improvement on the vitreous organ.

Honors to an American Physician.—Dr. D. B. McCarte, of this city, who has passed many years in China and Japan, was recently decorated by the Mikado of Japan in recognition of services performed by him in the cause of medical education in Tokio.

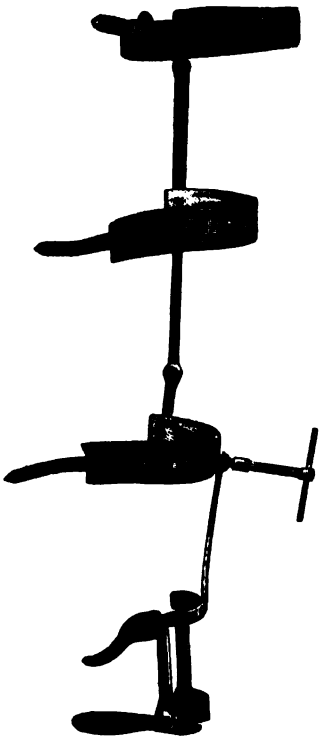
New Instruments.

AN APPLIANCE FOR THE CORRECTION OF INVERSION OF THE FOOT.

By THOMAS L. STEDMAN, M.D.,

ASSISTANT SURGEON TO THE NEW YORK ORTHOPÆDIC DISPENSARY AND HOSPITAL.

In certain cases of club-foot, after the varus deformity has been overcome there remains an inverted position of the member which is often a source of considerable annoyance and perplexity to the surgeon. This deformity is not due to weakness of the rotator muscles of the thigh, for the latter is usually rotated outward beyond the normal, through the patient's efforts to rectify the position of the foot. The inversion is located at the ankle, and the appliances commonly employed are inefficient, since they ignore this fact, and are so constructed as to increase the outward rotation at the hip. By their use the foot may be made to point anteriorly, indeed, but the knee is at the same time turned outward to such an extent that locomotion is rendered awkward, and almost impossible.



In the apparatus here figured I have endeavored to obviate this difficulty by applying the rotatory force so as to act upon the foot alone. The support consists of a simple external upright bar, jointed at the hip and knee, attached to a pelvic band above and provided with other bands encircling the thigh and the leg immediately below the knee. From the posterior portion of the lower band a rod with endless screw attachment passes down to the ankle-band of the scarpa shoe. In applying the brace the foot-plate is to be turned by means of the key until it corresponds exactly with the position of deformity. Then, after the heel is strapped firmly into the cup and a strong, well-fitting shoe applied, the key is turned so as to rotate the foot as far outward as may be desired. The normal position of the knee is not interfered with, although the foot may be slightly everted, and the patients are enabled at once to walk easily and almost gracefully.

107 WEST FIFTY-FOURTH STREET.

THE MICROBE OF ERYSIPELAS.—At a recent meeting of the Académie de Médecine, M. Cornil stated that a microbe is present in all forms of erysipelas. The organisms have been cultivated on gelatine by Fehleisen and Rosenbach. They are round, generally arranged in pairs, or in sinuous bands. The microbe of erysipelas is a streptococcus. Rosenbach asserts that there is a difference between the streptococcus of erysipelas and the pyogenic streptococcus. M. Cornil failed to observe any difference, but believes that, if the identity between the streptococcus of erysipelas and the streptococcus present in phlegmonous inflammation be not fully established, it is nevertheless demonstrated that erysipelas is always provoked by the presence of streptococci in the connective tissue, the plasma of the lymph, and the blood.—*British Medical Journal.*

Army and Navy News.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from July 12, 1885, to July 18, 1885.

VOLLUM, E. P., Lieutenant-Colonel and Surgeon. To be relieved from duty in Department of the East on the expiration of his present leave of absence, and to report to Commanding General Department of the Platte for assignment to duty as attending surgeon at the headquarters of that department. S. O. 159, A. G. O., July 14, 1885.

MIDDLETON, J. V. D., Major and Surgeon. Leave of absence extended fifteen days. S. O. 159, A. G. O., July 14, 1885.

BROWN, J. M., Major and Surgeon; EWEN, CLARENCE, Captain and Assistant Surgeon; TAYLOR, A. W., Captain and Assistant Surgeon; and BORDEN, W. C., First Lieutenant and Assistant Surgeon. Ordered to prepare for field service. S. O. 64, Department of the Platte, July 9, 1885.

GRAY, W. W., Captain and Assistant Surgeon. Relieved from duty at Fort Barrancas, Fla., and ordered for duty at Fort Columbus, N. Y. Harbor. S. O. 147, Department of the East, July 13, 1885.

EVERTS, EDWARD, First Lieutenant and Assistant Surgeon. Ordered for duty as Post Surgeon, Fort McDermott, Nev. S. O. 68, Department of California, July 11, 1885.

POLHEMUS, A. S., First Lieutenant and Assistant Surgeon. Ordered for duty as Post Surgeon, Benicia Barracks, California. S. O. 68, Department of California, July 11, 1885.

WINNE, C. K., Captain and Assistant Surgeon. Ordered for duty at Benicia Arsenal, California. S. O. 68, Department of California, July 11, 1885.

EDIE, G. L., First Lieutenant and Assistant Surgeon; BLACK, C. S., First Lieutenant and Assistant Surgeon. Ordered for duty with troops *en route* to Department of the Missouri. S. O. 78, Department of Texas, July 10, 1885.

Official List of Changes in the Medical Corps of the Navy for the week ending July 18, 1885.

OWENS, THOMAS, Assistant Surgeon. Granted sick leave for one month. July 14, 1885.

Medical Items.

CONTAGIOUS DISEASES—WEEKLY STATEMENT.—Report of cases and deaths from contagious diseases reported to the Sanitary Bureau, Health Department, for the week ending July 18, 1885:

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-spinal Meningitis.	Measles.	Diphtheria.	Small-pox.	Yellow Fever.
Cases.								
July 11, 1885.....	0	12	46	1	109	70	0	0
July 18, 1885.....	0	11	31	4	69	50	3	0
Deaths.								
July 11, 1885.....	0	3	9	1	21	34	0	0
July 18, 1885.....	0	3	3	4	18	18	0	0

DEGENERATION FROM CITY LIFE.—Mr. James Cantlee, F.R.S., in a lecture before the Parkes Museum of Hygiene of London recently, presented a startling picture of the unfavorable influence of life in that great centre of population upon its inhabitants. *The Maryland*

Medical Journal, April 18, 1885, "cannot help thinking that he has very much overdrawn the picture, and that he has taken what is at best only of frequent occurrence among the lowest class of people as the prevalent condition of things. Yet he speaks very absolutely, and, coming from so high an authority, it is startling to reflect upon the wide range of application which his remarks may have, even reaching our American city population. The degenerating influences of city life—with its crowds, its dust, its vitiated atmosphere, its deprivation of sunshine and light, and want of healthful out-door exercise—cannot certainly be exaggerated, and the most intelligent efforts of sanitarians are needed to deal with the problems connected with these sources of physical degeneration. 'It is well-nigh impossible,' said Mr. Cantlee, 'to find a third, and absolutely impossible to find a fourth generation of pure Londoners—the progeny ceases partly from moral and partly from physical decline and inability of continuance.' The pure Londoner of the third generation, which he has been able, after much search and inquiry, to get hold of, is a picture of physical decline, involving shortness of stature, narrow chest, deformity of jaws, miserable appearance (squint prevailing), scrofulous diseases, and small head. Pure Londoners are seldom to be found in work-houses, because they die young. The only notion a Londoner has of relaxation is a run to the country or the seaside on a bank holiday. He foretold evil to the townsfolk of to-day if measures were not taken to provide means of exercise in fresh air. It is a serious question whether the welfare of this country shall in the next generation be left to a race out of whom all enthusiasm and earnestness has passed."

Epilepsy and Motor Functions of the Cortex.—M. Vulpian has recently shown, after having determined what is the minimum electric stimulus necessary to apply to the gray substance of the brain in order to provoke movements, that the same effects are obtained by a weaker current, if isolated electrodes (entirely covered by guttapercha, except at the extremity) be allowed to penetrate the gray substance until they reach the white matter. He also affirms that epileptic attacks are provoked by stimulating the underlying white bundles by weaker currents of less duration than those used for stimulating the surface of the gray substance. Other experiments by M. Vulpian tend to show that the gray cortical substance is of quite secondary importance in the pathogeny of epilepsy. M. Vulpian has arrived at this conclusion from freezing the cerebral surface of a dog by methyl-chloride, and then applying an electrical stimulus. M. Vulpian's views, if corroborated, will cause an important modification in the cortical theory of epilepsy.

Micro-organisms and Heat.—M. Charles Richet, at a recent meeting of the Société de Biologie, stated that heat helps the action of substances that impede or arrest the development of micro-organisms. In two bottles of urine mixed with a few drops of putrid urine, five milligrammes of mercuric chloride were added; one remained in the laboratory, the other was placed in a stove at 40° C. (104° F.). In the former, micro-organisms were developed; the other, which was subjected to heat, remained clear and limpid.—*British Medical Journal.*

The Latest Form of Hospital Construction.—The newest form of hospital design is the circular, which has attracted a good deal of attention of late, and designs of which were shown recently by Mr. Henry S. Burdett. Mr. Burdett states that the first advocate of the circular type of hospital wards appears to have been Dr. McKenna, a physician in Melbourne, in 1854, owing to his experience of the treatment of the wounded in the churches and chapels (which invariably took a circular form) of Spanish America, during the civil wars there. He noticed that the majority of the patients treated in the rectangular convent rooms died, while the large proportion of those placed in the circular churches adjoining survived. The plans of all the public circular hospitals which have been erected, or which are in course of erection, together with the latest example of a military hospital designed on the same principle, are now exhibited together for the first time. The advantages claimed for this type of hospital are: (*a*) its ready adaptability to the most confined site, (*b*) the more perfect aëration of the ward blocks, (*c*) freedom from stagnant corners internally, (*d*) the free admission of sunlight throughout the day, (*e*) increased superficial, floor, wall, and air space, and (*f*) a central system of heating and ventilation, which has an equal effect upon all points of the ward. Properly constructed, the distinctive advantages of the circular over the rectangular form of ward have been aptly shown by Professor John Marshall, F.R.S., the first advocate of this system in England, by comparing the circular ward to a tent. It has been found by experience that this form of construction is not, however, suitable for wards of less than ten beds, or possessing a smaller diameter than thirty-five feet.

Chloroform and Tape-worms.—Dr. N. O. D. Parks, of Ashton, R. I., after unsuccessfully using filix-mas, prescribed the following to a woman with tape-worm: He ordered her to fast for twenty-four hours, at the end of which she was to take one drachm of chloroform in an ounce of syrup in three doses, at intervals of two hours, to be followed in an hour by ol. ricini, two ounces. The prescription was completely successful.

A Compound Western Medical College—We take an opportunity, somewhat tardily, to give our readers the benefit of whatever justification may be found in the following letter from Irving J. Manatt, presumably Chancellor of the University of Nebraska. We would like to be more than just and say a kind word for the medical college herewith described. It appears, however, from evidence in our possession, that, unofficially at least, it has adopted unworthy methods in the solicitation of students. However, we will at least hope that it in time may shun eclecticism, etc., and become a creditable institution. Our correspondent writes: "My attention has been called to an editorial note in your issue of the 11th inst., of which note I enclose a copy herewith. As to matters of fact therein asserted, it is true that the University of Nebraska includes a College of Medicine; it is not true that this college 'has been taken possession of by eclectics.' From catalogues accompanying this you will observe that the medical faculty here consists of nine regular professors and three lecturers, with three special chairs of homœopathic and two of eclectic medicine. The college is not as yet materially supported by the State, having been organized by the Board of Regents in 1883, on an offer of gratuitous service by the faculty for a period of two years. It is believed that the college has justified its being and will be put upon a substantial basis at the coming session of the Legislature. As regards the *Nebraska Medical Journal*, it is in no sense the organ of the college, and is neither authorized nor patronized by the University. It is, so far as I can learn, purely and simply a private enterprise on the part of its editors, two of whom happen to hold the eclectic chairs in the college. As your note was calculated to give an injurious impression of the University, I trust you will do us the justice to make this correction."

Poliambulanza di Milano.—We have received the first annual report of the Milan Policlinic, for the year ending September 30, 1884. The institution was opened with three classes in May, 1882, but its organization was not completed until January, 1884. There are now eleven classes comprising all the recognized specialties, but not including general medicine and surgery. The number of patients received during the year was 12,179, of which 2,794 were in the orthopædic class, 2,380 in the ophthalmological, 1,010 in the otological, and 2,298 in the class of children's diseases. These figures would seem to indicate that the establishment of a dispensary of this sort was not uncalled for.

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Original Articles.

INTRODUCTION TO A DISCUSSION ON THE DIAGNOSIS AND TREATMENT OF TUMORS OF THE BLADDER.[1]

BY REGINALD HARRISON, F.R.C.S.,

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AT the request of the Secretaries of this Section, I have undertaken the responsibility of opening a discussion on the diagnosis and treatment of tumors of the bladder.

Only a few years ago, anyone occupying this position would probably have felt bound to offer an apology to his audience for the scantiness of the material upon which he had to dilate; such, however, has been the progress of surgery within our recollection, that I feel myself differently circumstanced, and shall ask your indulgence in my attempt to compress the large amount of material which the experience of many has already supplied.

Time is more than precious on occasions such as these, and I must, therefore, avoid all historical references, deeply interesting and instructive as they are, and deal with my subject from a purely clinical point, feeling assured that this is the direction which will best answer our purpose to-day.

Under the guidance of the distinguished surgeon who presides over our Section, and in the presence of many who have made valuable contributions to this subject, I have the satisfaction of anticipating that the speakers who follow me will fill in the numerous gaps I must necessarily leave, and correct defects in my statement of which I am only too conscious.

I shall confine my remarks to tumors of the bladder proper, adopting where requisite the nomenclature set forth in the report of the Committee appointed by this Association, for the drawing up of which we are largely indebted to Mr. Paul.[2]

It is hardly necessary that I should occupy time with any remarks on the diagnosis of these growths other than those which will incidentally occur. Chief reliance will be placed on the circumstances under which blood appears in the urine, the manner in which the mechanism of micturition is interfered with, the presence or absence of evidences of new growth in the excretion, and the direct and indirect indications which may be afforded by the use of the sound or the catheter.

It will be convenient to arrange tumors of the bladder into two classes or stages: 1, Those which, during their entire existence, or for a portion of it, occasion either slight or no distinct indications of their presence; and 2, those which declare themselves by symptoms either seriously disturbing the function of micturition, or which by their constancy or degree threaten the life of the patient.

From the manner in which I have thus attempted in general terms to make use of a classification, it will be at once understood that individually I should be guided as to treatment, not by the fact alone that a patient has a growth in his bladder, but by the symptoms it produces.

The mere subjective evidence that a patient has a tumor of this kind would not, I submit, warrant the adoption of any operative measures to effect its removal, even if in addition it were possible to demonstrate its existence by other means than digital exploration. Some tumors of the bladder which have been found in the post-mortem room appear to have had no history connected with them, and instances are known in patients of the total disappearance, after varying intervals, of symptoms which were unmistakably those of villous growth or papilloma. Of the latter I believe that I am acquainted with more than one case. These are important facts, as they seem to indicate that what nature can accomplish, art may hope to imitate. How these growths thus disappear, whether it is by an accidental self-strangulation, or by an inflammatory act, it is impossible to say; but that they do so occasionally, without recurrence, I have not the least doubt.

Unfortunately, however, by far the larger proportion of them sooner or later pass out of the condition where operative interference is not to be recommended, and enter upon what I have taken as the second stage of their existence. Whether the transition is slow or rapid, gradual or sudden, much depends on their kind; but whether innocent or malignant, primary or secondary, the great majority of them, sooner or later, make it apparent that life will eventually be destroyed, either by persistent hemorrhage, or by the degree micturition is interfered with.

The question of operative interference will now be entertained; but before anything further can be said as to the hope of success which is likely to follow this, it is necessary that a more accurate knowledge of the connections of the growth should be obtained. This brings me to speak of digital exploration of the bladder.

If you will look at the two drawings which I show, you will see examples of two very opposite conditions; one where everything may be hoped for from operation, where complete recovery modern surgery has proved to be possible; and the other where nothing is to be expected except the relief of those symptoms of urgency which have rendered an opening into the bladder necessary. The first drawing represents a villous growth of three and a half years' duration, with a narrow pedicle, and is taken from Quain's "Clinical Lectures" (Plate xxiv.), which have recently been published; the second is an epithelioma extensively connected with the posterior wall of the bladder, from a specimen of my own in the Liverpool Museum.

Illustrations like these tend to show that though the diagnosis may be correct, the prognosis, so far as operative treatment is concerned, may fall very short of our desire, as the propriety of attempting to remove such growths can never be foretold until the finger has been placed in contact with them.

Digital exploration of the bladder relative to the treatment of tumors seems to me to be called for when it can fulfil at least three objects: 1, The relief of symptoms which are otherwise irremediable; 2, for verifying the diagnosis of tumor; 3, for determining whether the removal of the growth can be proceeded with. The circumstances which require a surgeon to open the bladder for the purpose of finding out what is inside it must be very exceptional; but when by this proceeding the three important objects I have mentioned are to be obtained with little risk, then its importance cannot well be overrated. There are recorded cases which seem to suggest that if the exploratory examination had been limited to

[1] Read before the Surgical Section of the British Medical Association at its Annual Meeting, 1885.

[2] British Medical Journal, January 12, 1884.

providing a means for draining the bladder, and for examining the growth, it would have been better.

In the case of an epithelioma of the bladder, such as you see in the illustration, which I have also taken from Quain (Plate xxix.), to attempt its extirpation is obviously out of the question; to explore it with the finger, and to feel so far satisfied, and at the same time to give the patient an opportunity of emptying his bladder completely by means of a short and open road so long as he lives, is legitimate; nay, further, experience has already sufficiently shown that there is no better way of controlling the considerable bleeding which nearly always attends these cases, than by providing the means of permanently maintaining the bladder in a condition of more or less contraction.

And now a few words in reference to the operation for exploring the bladder with the finger. If there are two ways to a place of about the same length but with somewhat different surroundings, you may depend upon it you will have two sets of travellers, with the same aims, but with very opposite notions as to the respective merits of the two routes. So with the bladder; though we are agreed as to the necessity of exploring it, we are not so unanimous about the route. In this country, as well as in America, median perineal urethrotomy seems to be preferred, whilst in France the claims of the suprapubic operation have been forcibly urged by Professor Guyon, Pousson, and others. Sir Henry Thompson has advocated the former method, not only as being the safest and most convenient for exploration, but, as he has shown by examples, for extirpating these growths. It seems to me that this form of procedure is to be preferred on several grounds.

In the first place, it provides a direct access to the more usual position of these growths; by a continuance of the incision forward into the membranous urethra and backward to the extreme limit of the prostate, it affords more room for manipulation than at first sight appears; but what is of more importance, it is, I believe, the best position for the drainage to follow, and which is a most important item in the management of these cases. If a perineal exploration shows the position or character of the tumor to be such as would be benefited by an access from the front, should it be determined to remove it, there is nothing to prevent the addition of the suprapubic incision, as Billroth demonstrated. A suprapubic incision is none the worse for having a more dependent opening, as Frère Côme practised a hundred years ago in connection with his success as an operator for stone. But, as I have already intimated, the great importance of the after-treatment, in relation to thorough drainage, renders, to my mind, the perineal procedure almost a necessity.

In connection with this point, it must not be forgotten what are the conditions under which these operations are often undertaken. In addition to the tumor which it is purposed to remove, there are usually present, either in the bladder itself, or in the organs associated with it, pathological changes which add considerably to the danger arising from the retention of anything which ought to escape. The viscus is occasionally sacculated, the ureters are patent and frequently largely distended, whilst the kidneys are rarely sound where the obstruction caused by the growths has been of long continuance. Hence we have much to fear from any extension of a suppurative process after the operation, as I have seen in two instances which have recently come under notice. One of the best safeguards against a contingency such as this, is thorough drainage, and this I think can best be secured through an opening in the perineum.

The feasibility of attempting to remove the tumor having been determined by digital exploration, the precise means of doing so has now to be considered.

It will not be necessary for me to describe at length how this has been effected after an opening has first been made into the bladder; in some instances the finger-nail has sufficed; in others, various kinds of forceps; quite recently, Mr. Pitts has recorded [1] a case where a growth was successfully removed by the *écraseur*. In examining two cases which terminated fatally, it appeared that if it had been possible to have applied a ligature round the pedicles, and then to have removed the growths cleanly, either with forceps or scissors, a different result might have followed. The nearest approach to such a proceeding seems to be one recorded by Mr. Henry Morris,[2] who, failing on the first attempt to remove a growth, in consequence of the want of the most appropriate means for extraction, the patient was left for two days, when the tumor was found prolapsed into the wound. Having stretched the edges of the wound apart by retractors, he succeeded in placing a ligature of catgut over the base of the growth and removing it with scissors. The patient made a good recovery.

When, after the bladder has been opened and explored, it seems practicable to remove the tumor, this should be effected as completely as possible; to take away a portion of it is to leave the remainder to inflame, suppurate, and possibly to become gangrenous, thus providing a fruitful cause for pyelitis, through the largely dilated ureters. Not being entirely satisfied with the forceps that hitherto have been used for the purpose of seizing and extracting these growths, I have had some others made for me by Messrs. Krohne & Sesemann, which, so far as I have been able to judge of them in practice, are well adapted for this object. It will be seen that they consist of an ordinary pair of bladder-forceps, with a free margin; by this contrivance it is almost impossible to do any damage to the wall of the bladder itself. The removal of the growth is effected partly by twisting slowly with the hand, and partly by the crushing action of the jaws of the instrument. In the exploration of the pedicle, both before and after removal of the growth, I have found one of Marion Sims' enucleator hooks exceedingly useful. If, however, the connections of the tumor are extensive, and there is a doubt as to whether all can be got away without doing serious damage to the bladder itself, I feel sure that we had better content ourselves with the opening, which may under all circumstances be safely made, and the drainage that this opening with a suitable apparatus will provide. The lesser proceeding has in many instances proved the means of arresting hemorrhage, and of adding materially to the comfort, as well as to the life of the patient, even where it has been found impossible either to remove the tumor, or with safety to reduce its size.

Time will not permit me to illustrate these remarks with cases from my own practice, where I have operated in accordance with the views expressed in this paper; these have already been noticed in a previous communication.[3]

I hope that Dr. Stein of New York, who has contributed importantly to the literature of this subject,[4] can tell us something to-day as to the general results following operative treatment, drawn from his most recent investigations upon this point.[5]

And what applies to the male is equally applicable to the female, though with the latter, by reason of the anatomical differences in the parts, both exploration and removal can be more readily effected. My friend, Dr. Alexander, of Liverpool, was, I believe, one of the first in this country to demonstrate the successful removal of growths from the bladder under these circumstances.

Of excision of portions of the bladder I have had no experience; so far as I am aware, it has been limited to some experiments on the lower animals, in furtherance of the subject which we have now under discussion.

In conclusion, it cannot be denied that operative surgery has already proved itself to be of considerable service

[1] Clinical Society, May, 1885. [2] The Lancet, April 21, 1884.
[3] On the Surgical Treatment of Hæmaturia, Liverpool, Medico-Chirurgical Journal, July, 1884.
[4] A Study of the Tumors of the Bladder, New York, 1881.
[5] Results of Operations, New York MEDICAL RECORD, No. xxviii., 1885

in the treatment of a very distressing class of disorders, and for which little is to be hoped for from medicinal agencies.

If I may be thought to have been too general in some of my remarks, permit me to say that this has been my intention; my object has been to open a discussion, and not to narrow it unnecessarily. The time has not arrived when it would be possible to lay down hard and fast lines of demarcation; much must be left to individual judgment. Where therapeutics are to end and surgery is to commence, experience and the application of those principles which are of general utility, and are not the exclusive property of any one set of organs, will enable us to determine what is best for each case as it presents itself to our notice.

ON FEEDING THE SICK.[1]

By WILLIAM ROBERTS, M.D., F.R.S.,

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My first duty is to express my acknowledgments to the Council of the Association, and to the South Wales and Monmouthshire Branch, for the honor they have done me in inviting me to deliver the address in therapeutics. This is, I believe, the first occasion in the history of the Association on which, from the wide domain of medicine, that portion which deals with the treatment of the sick has been specially selected as the theme of an address at the Annual Meeting. The subject of therapeutics is so large and complex that to deal with it comprehensively within the compass of an hour's address would be beyond my powers. Such an attempt, even in much abler hands than mine, could scarcely issue otherwise than in the enunciation of a series of barren generalities which would edify no one. I therefore felt, as soon as I came to consider the matter, that the most prudent course for me, and the one most likely to prove interesting to you, was to confine myself to a very limited area in the field of therapeutics, and to endeavor within that area to say something which might prove of use in the daily practice of your profession.

Perhaps of all the many duties which fall to the province of the medical practitioner, there is none so common as the duty of regulating the diet of his patients. Whatever the disease may be from which the patient is suffering, and whatever special means may be indicated for his relief, the regulation of the diet is sure, sooner or later, to crop up as an integral part of the management of the case. Dietetics, therefore, cover more ground than any other branch of the healing art—they are also, perhaps, the most ancient branch. Hippocrates traces back the very origin of medicine to dietetics. "For," he says, "the art of medicine would not have been invented at first, nor would it have been made a subject of investigation, if, when men are indisposed, the same food and other articles of regimen which they eat and drink when in good health were proper for them, and if no others were preferable to these." Notwithstanding this universal applicability, and this high antiquity, it must, I think, be allowed that dietetics, except in a few special cases, are somewhat neglected in these days. The often contradictory advice which is tendered to invalids in regard to their diet by the several medical men whom they may consult, betrays the want of a guiding principle and of a general consensus of opinion in the medical profession on the subject of feeding the sick. This is, perhaps, not to be wondered at when it is considered how little systematic study is devoted to dietetics, and how fragmentary is the instruction on this subject which is given to the student of medicine. So far as I know, there is no systematic teaching of dietetics, even on the most limited scale, afforded to the student at any of our medical schools. He is left to pick up his knowledge of this subject, as best he may, during the earlier years of his practice—and he often ends by taking his own digestive organs as his type, and prescribes for his patients according to the likings and dislikings of his own stomach. This is, I need hardly say, a very unsatisfactory proceeding; for there is, perhaps, no subject in which individual experience is so fallacious a guide as dietetics, and none in regard to which it is more important to draw our inductions from a wide basis of facts.

The first prerequisite for the acquisition of a sound knowledge of the dietetics of the sick is to have clear ideas on the origin and meaning of the dietetic customs of the healthy; for it is obvious that the proper diet for the sick must be some purposive modification of the diet of the healthy. We have, perhaps, been too much inclined to seek, or to seek too exclusively, in the physiology of digestion and nutrition, for our guiding principles and our point of departure in the study of dietetics. I doubt whether this is always, or even generally, the best starting-point. There are problems in human dietetics which appear to be beyond the reach of physiological research. What conceivable physiological inquiry, for example, could throw light on such problems as the following: What are the remote effects of the use or disuse of meat, or of alcoholic beverages, or of tea and coffee, on the bodily health and mental attributes of the individual and on those of his descendants in succeeding generations? And such questions are certainly, as I believe, involved in a comprehensive study of dietetics. On the side of natural history, it seems possible to approach such questions with some hope of success. For if we had the information, and could compare the mental and physical condition of the classes and nations which use these articles systematically, with that of the classes and nations which abstain from them, the elements of a solution would seem to offer themselves.

I venture, therefore, to say that the science of dietetics must be mainly based and built up on an observation and a study of the practices and customs of mankind in regard to their eating and drinking, rather than on any *à priori* data supplied by physiology. In the case of the lower animals, we assume that each creature selects, from the nutrient materials within its reach, those articles which are most suited to its well-being, and are best fitted to promote its success in the struggle for existence, and that it is guided in this selection by an almost unerring instinct. This, like other instincts, is now explained by biologists as consisting essentially in an inherited experience, which has been gradually accumulated through a long line of ancestors, and is transmitted by heredity to the descendants. Accordingly, when we see an animal feeding on a particular kind of food, we conclude without hesitation that that food is, of all the nutrient materials accessible to it, the best adapted for the special wants of its economy. But we know that man, in regard to his bodily functions, is subject to the same laws as govern the life of the lower animals; and we cannot doubt that in the formation of his dietetic habits man is guided by the same kind of instincts as those which guide the rest of the animal creation in the choice of their food.

The generalized food-customs of mankind are, therefore, not to be viewed as random practices adopted to please the palate, or to gratify an idle or vicious appetite. These customs must be regarded as the outcome of profound instincts, which correspond to important wants of the human economy. They are the fruit of a colossal experience accumulated by countless millions of men in successive generations. They have the same weight and significance as other kindred facts of natural history, and fitted to yield to observation and study lessons of the highest scientific and practical value.

In taking dietetic customs as objects of study it is obvious that widely disseminated customs, followed by many races and by vast masses of population, have a deeper

[1] Address in Therapeutics, read at the Annual Meeting of the British Medical Association, July 29th.

and broader significance than customs limited to a few races or to small communities. It is also obvious that the practices of the more successful races, and of the easier classes of a nation, are more likely to yield good dietetic models than the practices of backward races or of the poorer classes, because the former, owing to their ample means, have greater freedom of choice, and because also their greater success in the struggle for predominance is *primâ facie* evidence of the beneficial tendency of their food-habits. I need hardly say that dietetic customs which are not the outcome of the free choice of the population, but are the consequence of legislative enactments or of religious injunctions, are of no utility as guides in the study of dietetics—except, indeed, as warnings of the mischief that may accrue from ignorant meddling.

The British races and the other races of Western Europe, together with their kindred and descendants in different parts of the globe, are, on the grounds just stated, fitted to supply us with a body of dietetic customs which may be regarded as a beneficial model. These races and nations are every way, but especially in intellectual power, and in their productiveness of men of originality and eminence, far in advance of all others. Their food customs have grown up spontaneously, without material interference from legislator or religious reformer. Their world-wide commerce has brought cheaply to their doors the products of every land and every clime, and has enabled them to exercise a greater freedom of selection that has been possible to any other races.

The salient characteristics of the diet of the Western nations may be expressed in a few words. It consists partly of cereal and leguminous and other farinaceous articles, and of green vegetables and fruit, and partly of the various forms of animal flesh. The systematic use of alcoholic beverages is universal among them; and they consume, in large quantities, tea, coffee, or cocoa, or all three.

It is important to remark that the main dietetic customs of a country grow up and are established for the benefit of the robust and healthy, of the sober and temperate, and those of mean or average constitution—in other words, for those who are bearing the burden of the day, and fighting the battle of life. These form the great mass and bulk of the adult population, upon whose bodily and mental efficiency national progress and ascendancy depend. A good many individuals, and even entire families, may not find these customs, in certain particulars, beneficial to their exceptional tendencies or weaknesses; they may even find in them a source of destruction to their health and life; but here, as elsewhere, and indeed universally in Nature's operations, the individual is sacrificed to the welfare of the community.

> So careful of the type she seems,
> So careless of the single life.

Alongside the main dietetic habits formed for the operative mass of the community, there are secondary habits formed for the use of infants and children, and for persons advanced in years.

With regard to infants and children we observe that they are not allowed to partake of the accessory articles of food which form so conspicuous a part of the dietary of their elders. They are allowed neither the use of alcoholic beverages, nor of tea and coffee—except gradually as they draw toward adult age—but are fed on simple nutrients, milk, cooked cereals, and more or less meat.

With advancing years the diet undergoes a certain modification; the consumption of meat is, I think, somewhat lessened, and the consumption of soups, milk, and cooked cereals proportionally increased. With regard to alcohol, this modification of diet seems to vary with the preceding practice of the individual. Persons who have been in the habit during their prime of taking a full allowance of stimulants gradually diminish the proportion as age creeps on and their nutritive processes decline in elasticity and power. Sometimes the indications of this natural tendency are neglected or resisted by the unwary; they imagine that the quantity of stimulants they tolerated with impunity during the vigor of manhood cannot hurt them in later life. This is a serious mistake, the commission of which tends to accelerate senile decay, and to provoke fatally tending organic changes in the large organs of the body and in the arterial system. On the other hand, persons who during their youth and prime have only used alcohol occasionally, or have abstained entirely from it, find advantage in their declining years in a more systematic use of alcoholic beverages.

There is a clear difference also to be discerned in the dietetic habits of the two sexes. There are no available statistical data to go upon, but, from common observation, we cannot fail to note that men eat much more meat than women. Probably we should not err in estimating that two-thirds of the meat brought to market is eaten by men and only one-third by women. In regard to alcohol the contrast is still more marked. My impression is that, in this country, three-fourths, if not four-fifths, of the alcohol consumed is consumed by men, and only one-fourth or one-fifth by women. This difference is consonant with our experience as medical men that women are more sensitive to the effects of alcohol than men, and are more easily injured by the excessive use of it. On the other hand, the consumption of tea and coffee, but especially of tea, is markedly more abundant among women than men. The comparison is completed when we add that women consume, in proportion to the totality of their food, more milk and more bread than men do.

It would not appear to be a wise proceeding to depart capriciously and without clear reason from the general dietetic customs of the country. We may be quite sure that the use of meat, and of alcoholic beverages, and of tea and coffee, subserves some useful purposes to the human economy, though we, in our ignorance, may not be able to specify them with precision. These customs are the spontaneous outcrop of natural instincts and the fruit of an immense experience, and the sanction they derive therefrom constitutes an incomparably higher authority than the opinion of the wisest among us.

Nevertheless, differences of constitution and personal idiosyncrasies have to be reckoned with; and there are frequently solid, indeed paramount, reasons why individuals should, in some particular or other, depart from the general dietetic plan. I have known a few natural-born vegetarians who have had a life-long distaste for meat. Some persons are intolerant of tea, others are intolerant of coffee. It is, however, with respect to alcohol that the most important deviations from the mean type of constitution occur. Some persons are made uncomfortable by the most sparing use of alcoholic beverages, either through their life or at some epoch of it. A good many also are wanting in that self-control which is necessary to the salutary use of this stimulant. These peculiarities or idiosyncracies must be attended to. It may be regarded as certain, as a very general rule at least, that any food or food-accessory the use of which is followed by a sense of discomfort is not beneficial to that individual. Persons who are unable to take alcohol in moderation should, on pain of loss of health and life, refrain from its use—for to them it is easier to abstain than to be abstemious.

These general considerations, as furnishing the natural groundwork of dietetics, should be kept steadily in mind in dealing with the practical questions which arise in feeding the sick. We may distinguish in a rough sort of way the patients who seek our aid in the matter of diet into two classes—namely, first, those who are able to take and to digest solid food and to conform in the main with the general dietetic habits of healthy people; and, secondly, those more seriously sick, who can take little or

no solid food, and must be fed on a plan deviating widely from the common custom.

The great majority of our patients belong to the former class, and are able to use the ordinary diet. They consist of invalids who are suffering from various ailments of the slighter sort, or from some more serious disease which does not interfere radically with the digestive functions. In regard to all these, I take it that (except in special cases, which I do not purpose to consider) it is a sound canon of practice to adhere to the main features of the current dietetic habits, and to avoid teasing our patients with irksome and needless restrictions for which we cannot give a clear reason. Diversity and variableness are marked characteristics of the dietary of the leading races of mankind—especially among the easier and more successful classes. The multifariousness of our eating and drinking is something very remarkable, and contrasts strongly with the monotonous fare of the less advanced races, and of the lower animals. Scarcely any two of our meals are exactly alike. Not only do the several daily meals—breakfast, dinner, etc., differ from each other, but the breakfast or dinner of one day usually differs more or less from the corresponding meal of another day. This variableness or diversity, we cannot doubt, fulfils some useful purpose beyond the mere gratification of the palate. It may, therefore, be inferred that to prescribe a monotonous regimen is to contravene a beneficial rule, and to depart from a salutary principle in human dietetics. We know that a healthy man soon rebels against a daily repetition of the same dishes, however wholesome and savoury; much more an invalid, with weak appetite and feeble enjoyment of his meals, who craves for more change and variety than the robust.

Another part of our duty is to study the peculiarities and idiosyncrasies of the invalid's stomach. Our stomachs are nearly as individual as our faces, and are very peremptory in regard to their likings and dislikings. In adapting diet to these idiosyncrasies it is, however, a good rule, as far as practicable, to lessen the quantity of the offending articles rather than to forbid them altogether; or, if they must be forbidden, to provide in their place substitutes of kindred nature. The practice of forbidding fresh vegetables and fruit is especially open to objection. These articles, in addition to their use in promoting the peristaltic action of the intestine, have important anti-scorbutic virtues; and although in these days, and among our own people, we almost never meet with fully developed scurvy, we are probably, without knowing it, often in the presence of incipient or larval scurvy. As there is a prearthritic stage of gout—a dietetic disease at the opposite pole of the feeding scale—so likewise, we may presume, there is a prehemorrhagic stage of scurvy. I have sometimes observed the existence of a low standard of health, without any very definite symptoms, which I could only attribute to a too protracted abstinence from fresh vegetables and fruit. I think it is possible to go too far in humoring a capricious stomach; and that, in persons of a hysterical or neurotic constitution, a too indulgent consideration for the ease of this organ may entail disadvantages in regard to the general nutrition of the body, and produce effects which in the long run tend to lower the level of health, and even to aggravate that gastric sensitiveness which we are seeking to abate.

I need hardly say that due mastication and cooking of the food are essential to easy digestion. Perfect cooking is especially important in regard to farinaceous articles and fresh vegetables. These are often imperfectly cooked and thereby rendered difficult of digestion by invalids. The bad reputation of potatoes and pastry in regard to digestibility is chiefly due to the fact that they are often imperfectly cooked.

A matter of considerable interest and importance is the regulation of the accessories which we use with our food. The chief of these are the various kinds of alcoholic beverages, and tea, coffee, and cocoa. These articles are usually taken with meals, and they mingle in the mouth and stomach with the food, and thereby directly complicate the task of the digestive organs. In the course of last year I subjected the effects of these accessories on salivary and peptic digestion to a somewhat extended experimental inquiry. The time at my disposal will not permit me to lay before you the details of these experiments; but as they will be shortly published I may ask you to take them for the present on trust, and to allow me to indicate some of the conclusions and practical lessons which appear to be derivable from the inquiry.

In studying the influence of our food-accessories on digestion, it is necessary to distinguish sharply between their action on the chemical processes, and their action on glandular and muscular activity. These two actions are quite distinct and generally opposed to each other; for, while all the food-accessories were found to exercise a more or less retarding influence on the speed of the chemical process, some, if not all of them, exercise a stimulating influence on the glands which secrete the digestive juices, and on the muscular contractions of the stomach. It is, also, necessary to distinguish between the effects of the food-accessories on salivary digestion and their effects on peptic digestion, inasmuch as wide divergencies were found to exist in this respect.

The distilled spirits—brandy, whiskey, and gin—were found to have but a trifling retarding effect on the digestive processes, whether salivary or peptic, in the proportions in which they are commonly used dietetically. Their obstructive effects only became apparent when used in quantities which approached intemperance. Taking this in conjunction with the stimulating action which they exercise on the glands which secrete the digestive juices, and on the muscular activity of the stomach, their effect in these moderate dietetic proportions must be regarded as distinctly promotive of digestion.

Wines and malt liquors exhibited an action differing considerably from that of ardent spirits. Wines were found to be highly inimical to *salivary* digestion. Even very small quantities of sherry, claret, hock, or champagne inhibited the action of saliva on starch to a very high degree. This is due to the considerable acidity which all wines possess. When this acidity was neutralized by the addition of an alkali, the inhibitory effect of wines on starch digestion was entirely removed. It is a common practice, as you know, to mix wines, especially sherry, claret, and hock, with soda, seltzer, or some other effervescent table-water. These waters all contain a charge of alkaline carbonate, and it was found that when wines were thus mixed they ceased to embarrass salivary action. This practice may, therefore, be looked on as highly commendable in the case of persons of weak digestion.

On *peptic* digestion wines exhibited a retarding effect altogether out of proportion to the alcohol contained in them. Both the stronger and the lighter wines, except in very moderate proportions, checked the speed of peptic digestion. In the customary dietetic use of wines with meals there is, probably, a double action—on the one hand, a stimulating action on the secretion of gastric juice and on the muscular contractions of the stomach, and, on the other hand, a retarding effect on the speed of the chemical process. In the case of persons of weak digestion, wines should be taken sparingly, and the quantity so adjusted as to bring out their stimulating action without provoking the retarding effects which follow their more liberal use. Champagne was found to have a distinctly less retarding power than an equal volume of claret or hock. This I judged to be solely due to the mechanical effects of the effervescence and liberation of gas, whereby a more efficient stirring up of the digesting mass would be effectuated. Effervescent wines therefore, other things being equal, favor the speed of peptic digestion more than still wines.

The effects of tea, coffee, and cocoa exhibited some interesting diversity. It was found that tea had an intense inhibitory effect on *salivary* digestion; even in very

minute proportion it completely paralyzed the action of saliva. On the other hand, coffee and cocoa had only a slight effect on salivary digestion. The inhibitory action of tea on saliva was found to be due to the large quantity of tannin contained in the tea-leaf. Some persons have supposed that by infusing tea for a very brief period—two or three minutes—the passage of tannin into the beverage could be avoided. This, however, is a delusion. Tannin is one of the most soluble substances known—it melts like sugar in hot water. One gentleman of my acquaintance, in his horror of tannin, was in the habit of preparing his tea by placing the dry leaves on a paper filter, and simply pouring on the boiling water. In this way he thought to evade the presence of tannin in his tea. But if you try the experiment, and allow the product, as it runs through the filter, to fall into a solution of perchloride of iron, you will find that an intense inky-black coloration is produced, showing that tannin has come through in abundance. You can no more have tea without tannin than you can have wine without alcohol; and I found, experimentally, that tea infused for two minutes had almost exactly the same inhibitory effect on digestion as tea infused for twenty or thirty minutes. If you wish to mitigate the effects of tea on salivary digestion, you should direct the patient not to sip the beverage with the meal, but to eat first and drink afterward. In this way time is given for the saliva to perform its functions unhindered. Another device is to introduce a pinch of carbonate of soda into the tea-pot: this removes the deterrent effect of tea on salivary digestion; it is a practice occasionally followed in some households under the idea that soda helps to extract the virtues of the tea-leaves. It was found that the addition of so small a proportion as one per cent. of the weight of the dry tea greatly mitigated its injurious effect on starch digestion, and that twice this quantity (two per cent.) almost entirely removed it. This latter proportion corresponds roughly to ten grains of bicarbonate of soda to an ounce of tea-leaf.

The effects of tea, coffee, and cocoa on *peptic* digestion were found to be as nearly as possible alike for infusions of equal strength. All three exercised a retarding effect when their proportion in the digesting mixture rose above twenty per cent. These beverages should therefore be taken very moderately by persons of weak digestion. The good reputation of cocoa in regard to digestion seems to be wholly due to the fact that it is used in weaker infusions than tea and coffee. The directions for the preparation of this beverage, printed on the packets of cocoa sold in the shops, indicate a strength of about two per cent.—whereas a medium tea is usually made of a strength of four to five per cent., and a medium coffee of a strength of five to seven per cent. The strong coffee which it is customary to hand round after dinner must have a powerful retarding effect on gastric digestion, and although this practice may be salutary to robust eaters, it is not to be recommended to those of feeble peptic power.

FEEDING THE SICK WITH LIQUID FOOD.

In a considerable number of conditions our patients are unable to take solid food, and are reduced to the necessity of using food which can be administered in the liquid form. This is usually the case in the febrile state and in serious organic disease, especially of the abdominal organs, and in the terminal stages of almost all diseases. There are other conditions in which, although the patient may have the ability to take solid food, it is not desirable that such food should be administered to him. In narrowing of the pylorus or other part of the digestive tract, in ulceration of the intestinal mucous membrane, it is obviously undesirable to administer articles of food which are capable of forming lumps or masses which may block up the narrowed parts of the intestinal tube or irritate the ulcerated surfaces. There is thus a large field for the employment of liquid food, and one of the most embarrassing tasks in clinical dietetics is to devise food in this form in sufficient change and variety, and having at the same time an adequate nutritive value. Our resources in this state of things consist of milk, beef-tea and other meat decoctions, cold-made meat infusions, raw eggs, and the various gruels. I propose to make some remarks on each of these articles.

Milk.—By far the most serviceable liquid food we possess is milk. Milk contains, in almost equal proportions, proteid, saccharine, and fatty matter, and is capable alone, as we know, of sustaining life. All plans of feeding the sick on liquid food centre round milk. It can be given alone, or mixed with tea, coffee, or cocoa, or with lime-water, soda-water, ardent spirits, or with farinaceous gruels of various sorts, or as buttermilk, koumiss, or whey. Were it not for the necessity of change and variety, we should, in a large number of cases, want nothing but milk. It should, however, be remembered, that milk is by no means a perfect kind of liquid food. In the course of its digestion, both in the stomach and in the intestine, milk, or rather the casein contained in it, is coagulated into solid masses, and these masses have to be redissolved before they can be absorbed. Not infrequently, if milk be given too freely, these curdy masses fail of being dissolved; and they pass down the intestine more or less unchanged, and are ultimately discharged with the stools. In this way milk may become an objectionable form of liquid food; these curds may block up a narrowed part of the intestine, or they may undergo putrefactive changes, and thereby irritate the tender or ulcerated mucous membrane. This drawback to the use of milk may be obviated by predigesting or peptonizing it, which is easily accomplished at a warm temperature by means of pancreatic extracts. The bitter flavor of peptonized milk is, however, nauseous to many invalids, and you cannot fully peptonize milk without developing this unpleasant flavor. One of the best means of covering the taste of peptonized milk is to add coffee to it. Another device, which may sometimes be adopted with advantage, is to add the pancreatic extract to cold or iced milk. In the cold the action of the ferment is comparatively slow, and it takes some hours to produce an appreciable change of flavor. But as soon as milk, thus charged with the ferment, is swallowed and passes into the warm atmosphere of the stomach, it is rapidly digested. I have seen, in cases of typhoid fever, when undigested curds of milk were observed to be coming away with the stools, this plan followed by the immediate disappearance of these masses from the motions. But the palates of invalids are sometimes abnormally sensitive, and they detect, and resent, the mere presence of the ordinary pancreatic preparations in articles of food, quite apart from the digestive changes produced by them. Recently Mr. Benger has placed at my disposal a pancreatic preparation which is absolutely free from taste and smell. This preparation, of which I have here a specimen, consists of the pancreatic enzymes in a highly-purified state, under the form of a light, nearly white, powder. It is not hygroscopic, and may be kept unchanged for an indefinite period fully exposed to the air.[1] This beautiful preparation is excessively active, and no palate can detect its presence in milk or other article of food until its effects are revealed in the process of digestion. I am inclined to think that it will prove a valuable addition to our resources when it is considered desirable to subject food to a process of predigestion, and still more when it is desired to add the ferment to the food in the cold state, with a view to promoting its rapid digestion after being swallowed.

Beef-tea and Other Meat Decoctions.—Next to milk in frequency of use and in high esteem come beef-tea and other meat decoctions. Long experience has satisfied us in this country of the usefulness of these preparations in feeding the sick. Beef-tea and its con-

[1] It slowly acquires a slight peculiar odor when kept in a tightly-corked bottle, but this passes off when it is exposed to the air.

geners, however, take rank as restoratives and stimulants rather than as nutrients. They contain no albuminous matter in solution, and the small quantity of gelatin contained in them cannot be of much account. There is a widespread misapprehension among the public in regard to the nutritive value of beef-tea. The notion prevails that the nourishing qualities of the meat pass into the decoction, and that the dry, hard remnant of meat-fibre which remains undissolved is exhausted of its nutritive properties, and this latter is often given to the cat or dog, or even, as I have known, thrown away as useless rubbish into the midden. A deplorable amount of waste arises from the prevalence of this erroneous notion in the households of many who can ill afford it. The proteid matter of meat is, as you know, quite insoluble in boiling water, or in water heated above 160° F. The ingredients that pass into solution are the sapid-extractives and salines of the meat, and nothing more except some trifling amount of gelatin. The meat remnant, on the other hand, contains the real nutriment of the meat—and if this be beaten to a paste with a spoon, or pounded in a mortar, and duly flavored with salt and other condiments, it constitutes not only a highly nourishing and agreeable, but also an exceedingly digestible form of food.[1]

Cold-made Meat Infusions.—The defect in nutritious value of beef-tea led Liebig to suggest the use of cold-made meat infusions. He recommended that minced beef should be infused in cold water acidulated with a few drops of hydrochloric acid. An infusion so prepared differs essentially from beef-tea in the fact that it contains in solution a large amount of albuminoid matter. The addition of the acid is, according to my observations, a needless complication of the process. Infusions quite as rich in albumen were obtained when simple water was used as when the water was acidulated with hydrochloric acid. Infusions made from minced meat with half its weight of water, and allowed to stand for two hours, and then pressed through cloth, were found on analysis to contain over four per cent. of dry albumen. This amount of proteid is equivalent to that contained in cow's milk. The nutritive value of such infusions is, therefore, very high. When heated to the boiling-point they coagulate into a solid jelly. Made from beef or mutton, the product has an unpleasant bloody appearance; but when made from veal, the coloration is much paler. The best preparation, however, is made from the meat off the breast of a chicken. This meat is nearly white, and it yields an infusion which is almost colorless, and which sets, on heating, into a solid white jelly of very agreeable appearance. Cold-made meat infusions cannot be heated above 114° F. without becoming turbid from commencing coagulation of albumen. It is, therefore, impossible to cook them without destroying their liquid character. The objection to these infusions is their raw flavor, which to many is highly disagreeable—though some invalids take them without the slightest objection. The best way of covering the raw taste is to add some ordinary beef-tea or a little of Liebig's extract of meat. Some prefer a flavor communicated by a slice of lemon, or by the addition of a little claret.[2]

Beaten-up Eggs.—Another highly nutritive form of liquid food is supplied by raw eggs. The yolk, or white, or both together, are beaten up in various ways and combinations which are well known. Eggs are more easily digested by the stomach in the cooked than in the uncooked state; but when the stomach is weak and unable to digest solid food, beaten-up eggs pass through it into the duodenum without being meddled with, and are slowly digested in their passage down the intestine. They are incapable of forming lumps or masses, and are, therefore, well adapted for cases of narrowing or ulceration of any part of the digestive tract.

Fortified Gruels.—A very important kind of liquid food is furnished by gruels made with the several kinds of cereals or leguminous seeds. Gruels are not by themselves an agreeable kind of food; they lack flavor. But mixed with milk or beef-tea they constitute a valuable addition to our resources in feeding the seriously sick. When prepared from the cereal flours in the usual way they can only be made of feeble nutritive power—if their liquid character is to be preserved. These flours are very rich in starch, and gruels made from them become thick and pasty if the proportion of flour used in their preparation rise to four or five per cent., and a gruel of this strength does not contain more than one-half per cent. of proteid matter. But if the meal be mixed beforehand with one-eighth of its weight of ground malt you can prepare from these flours gruels of much higher nutritive value and still preserve their liquid character. The diastase of the malt acts upon the thickening starch as the heat rises and converts it into soluble starch and dextrine. These fortified gruels can be made with as much as twenty per cent. of meal and still maintain the fluid state. Such gruels contain about two per cent. of proteid matter, and about fourteen per cent. of carbo-hydrates, and are admirably adapted, combined with milk or beef-tea, to supply a varied kind of liquid food of highly nutritious character. Mixtures of this class seem especially suited for nourishment of cases of typhoid fever.

A matter of interest in designing food for the sick-room and nursery is the consideration of the special properties of the several kinds of cereal and leguminous substances used as food. In point of chemical composition the several kinds of cereal grains are closely allied. Still there are differences between them; and these differences may be of importance. The proteid of wheat is not quite identical with that of oats or barley. On the other hand, leguminous seeds differ importantly in composition from the cereal grains. Taking the lentil as a type of the leguminous group, it is to be observed that lentil flour contains twice as much proteid matter as wheat or oat flour, and almost twice as much lime. Moreover, the proteid of the leguminous seeds differs materially from that of wheat or oats. These differences are probably of not a little importance in feeding the sick and the young; and if we had more knowledge and experience in their use, we could perhaps utilize with advantage these several cereal and leguminous products, and combine them in varied ways to meet the indications and necessities of different cases.

You must all have observed how there has grown up in these latter years an enormous trade in prepared "foods" for infants and invalids. The very success of this trade is some evidence of the usefulness of these articles. Their composition is generally made more or less of a secret, but whatever secret there be must be hidden within a very narrow compass. The several possible flours out of which these "foods" are mingled can be easily counted—wheat, barley, oat, maize, pea, lentil, and one or two others. These are the ingredients—with malt flour in some cases—out of which they are all compounded. Now, I cannot help thinking that it would be an advantage both to ourselves and to our patients if we knew more precisely what we were about in this matter; and if we were in a position to prescribe for infants and invalids the several kinds of farinaceous aliments in proportions known to us, instead of blindly using some mixture of which we know not the exact composition. It is impossible for us to make progress in dietetics on such a path. I can quite believe that these flours have their special excellences, and that they are severally adapted for different cases and conditions. In the first place, they have distinctive flavors, and thereby may be made to contribute to the important end of providing change and variety for the invalid. Moreover, the faculty of "agreeing" of the

[1] These remarks on beef-tea apply equally to Liebig's Extract of Meat, Brand's Essence of Beef, and Valentine's Meat Juice—all of which are devoid of albuminous constituents.

[2] Cold-made meat infusions keep badly. They should be preserved in a cold cellar—or, still better, on ice.

different flours in reference to the individual idiosyncrasy is a point of not a little significance. Lastly, the difference of chemical composition between the cereal and leguminous flours must have an important bearing on the dietetic uses of these two groups of aliments. It is, I repeat, a serious disadvantage that the control of the preparation of food for the sick-room and nursery should pass from the hands of the medical attendant to those of the purveyor. In the matter of drug-giving, all enlightened practitioners are chary of prescribing secret remedies. Such a practice, it is felt, must be fatal to the intelligent use of drugs. So it is with providing food for the sick. What we want is to have at our disposal a supply of the several articles of food in their simple state, and suitable appliances in connection with the sick-room or nursery for cooking and combining them in various ways according to the exigences of our patients.

If I were asked to enumerate the ingredients and apparatus which are necessary for the cuisine of the sick-room and nursery, I think I could do so very briefly. In addition to the resources of the domestic kitchen and larder, the sick-room kitchen should contain a supply of the following flours: oat, maize, malt, and lentil flours in a finely pulverized condition and freed from bran. It should be provided with a solution of soda bicarbonate of known strength. This would be of use to add to milk when necessary, and to assist in the preparation of peptonized articles of food. Next to these would come a reliable pancreatic extract, and a preparation of pepsin or rennet for the production of whey. The associated apparatus should include a thermometer wherewith the nurse could, when desirable, heat up cold-made meat infusions to a proper temperature, and regulate the warmth required in the predigestion of food. A double-cased saucepan would form an indispensable item; this makes an admirable hot-water bath for the preparation of beef-tea and fortified gruels. A pair of scales, glass measures, and a mincing machine would complete the list. Finally, there should be, for the service of the nurse, a card or sheet containing plain directions for the preparation of the various kinds of liquid food.[1]

Given these simple appliances, I see no difficulty, in these days of skilled nursing, in the medical attendant being able to prescribe almost any kind of liquid food for his patients in any combination, and having it served up for the invalid in the most suitable possible manner. I have ascertained that there is no difficulty on the part of the miller in producing meals from malt, oats, or lentils, reed from bran and coarser particles, and in nearly as fine a state of preparation as wheaten flour. In this state these meals are susceptible of much more rapid and perfect cooking than when roughly ground. I have little sympathy with much that has been said of the advantages of whole meal and decorticated flour. It has been alleged that the too complete separation of the outer parts of the grain deprives the flour of its mineral matter. If we lived on bread alone there would be some force in this objection, but as that is not so, and as we find in milk, meat, fish, eggs, soups, and fresh vegetables a superabundant provision of mineral matter, and have, moreover, always at our elbows a supply of salt, there can never be any lack of saline materials in our food. The branny matter of the flour is both indigestible and irritating to the primæ viæ; and although it may not injure, or may even be useful, to the strong and healthy, it is quite an unfit element in food designed for the weak and tender membranes of the invalid and infant.

In bringing my remarks to a close I should like again to press for a more systematic and a more comprehensive study of dietetics. The effects of diet are profound and far-reaching, and exceedingly subtle. Some inkling of this is got from the history of gout. You all know how slowly and how insidiously the gout diathesis is developed under the influence of diet, and how it may affect the descendants into the third and fourth generations. The immediate effects of diet are often not the most important. Behind these are remote sequences of vital concern to the family and the nation. And it is not solely in regard to feeding the sick that a scientific knowledge of dietetics is useful. There are public questions of great moment, affecting the food-habits of the people, the consideration of which ought not to be dominated exclusively by popular opinion. In legislating on such questions it is of the last importance to proceed on correct lines; for it is certain that any policy which ignores the instincts of mankind and the laws of nature is foredoomed to failure. I believe that a comprehensive study of these questions from the side of history and of natural history would throw unexpected light on the issues involved, and furnish data of great value for the guidance of the legislator and social reformer.

[1] Messrs. Payne & Benger (Mottershead & Co., chemists, Manchester) have put together the ingredients and apparatus above enumerated in a portable box, of which a sample was exhibited at the Annual Museum.

ABSCESS OF BOTH FRONTAL SINUSES—OPERATION AND COMPLETE RECOVERY.[1]

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The following case of abscess of both frontal sinuses and of the ethmoid bone is presented, not only on account of its comparative rarity and the extensive absorption of bone-tissue, but also on account of the long time which elapsed between the occurrence of the injury and the appearance of the permanent distention of the sinus, as well as the very rapid recovery.

Jane L——, aged fifty-three, widow, presented herself for treatment on October 27, 1884. Fourteen years before, while engaged in chopping wood, a piece of large size struck her on the bridge of the nose and median line of the forehead with such force as to knock her down. It made an ugly lacerated wound about three inches long, running from a point a little to the right of the median line of the forehead, and midway between the superior orbital margin and the hairy scalp, downward to the left, across the bridge of the nose, and ending just at the end of the left nasal bone, on the side of the nose. There was a fracture of both nasal bones, and a slight deviation of the septum to the right side. There was considerable swelling produced in the soft parts, the right eye was entirely closed by infiltration into the eyelids, and a rather profuse purulent discharge from the wound for several weeks. The wound itself did not close for about seven weeks. Since then the patient has at times suffered from a sense of distention or pressure over the eyes, which after lasting a few days would subside. Nothing unusual occurred until about four years ago, when the patient first noticed a somewhat hard, elastic swelling at the upper and inner angle of the right orbit, which at first could by pressure be caused to disappear, but which gradually increased in size, extended downward and along the superior orbital margin outward toward the temple, until the eye was entirely closed by the swelling and the complete ptosis. At somewhat long intervals there would be all the signs of an acute inflammation in the lid and neighboring tissues, accompanied by great pain, but these symptoms always subsided under the application of continuous heat. When I first saw the patient there was complete ptosis of the right upper lid, but without any infiltration. In the upper and inner angle of the orbit was an elastic, firm, resisting tumor, which could be traced some distance backward beneath the superior orbital margin into the orbit. The tissues along the orbital margin and over the glabella and bridge of the nose were very markedly thickened. The scar of the old injury was plainly visible. On lifting up the lid the eye was found to be pushed downward, outward, and forward, and to be almost completely immovable. Vision was reduced to $\frac{1}{10}$ in this eye, and was normal in the other eye.

[1] Read before the American Ophthalmological Society, New London, July 15, 1885.

A diagnosis was made of distention of the frontal sinus, and the patient was told that an operation must be performed in order to relieve her, to which she at once consented. On October 31, 1884, the patient was etherized, and a free incision, nearly two inches long, was made through the upper lid, just beneath the orbital arch, and parallel with it. As soon as the knife had cut through the skin and fascia, it entered a deep cavity and sunk out of sight up to the haft. A very large quantity of fetid pus at once poured out and covered everything in the vicinity, and as the wound was enlarged it continued to well up from the deeper parts, assisted by pressure with the finger in the orbit, and by turning the head of the patient upon the right side, until between two and three ounces of pus had been evacuated, as nearly as could be estimated. After all the pus had been removed the cavity was washed out with a five per cent. solution of carbolic acid, all of which came out again through the wound, none passing down into the nose. A careful examination was then made with the probe and finger, and it was found that the right frontal sinus was enormously distended; its floor had been corroded and worn away by pressure at the superior orbital arch, nothing remaining but a very much thinned periosteum. The bony partition between the two frontal sinuses had disappeared in part, so that the probe and the finger could be carried into the sinus of the opposite side. The carious and purulent degeneration had extended into the ethmoid bone, which in the course of years had become an immense abscess, and the plate forming the inner wall of the orbit had been in part worn away, so that nothing separated the pus-cavity in the ethmoid bone from the orbit except the periosteum. All attempts to discover the existence of any connection with the superior nasal meatus, by means of the probe and syringing, failed, but this examination revealed the presence of numerous osteophytes, mainly situated in the cavity of the ethmoid and left frontal sinus. As many of these as could be reached with the finger or forceps were broken off, and then the entire cavity was again carefully washed out with a solution of mercuric bichloride, one to two thousand. A small rubber drainage-tube, properly fenestrated, was then introduced, the external wound and neighboring parts carefully sponged with the above solution, and covered with several layers of iodoform gauze, and the patient placed on the right side. For the first week the cavity was washed out every three hours, but afterward this was done only twice a day, and subsequently only once a day. After a few days the drainage-tube was found not to act well, as it became clogged; it was therefore removed, and drainage was carried on by a few strands of long-fibred lint ravellings. There was a slight rise of temperature on the day after the operation, and considerable swelling of the lids and region of the eyebrow, but hot applications and frequent syringing of the cavity soon removed the symptoms, and from this time the filling of the cavity and the recovery of the patient was uninterrupted.

The patient was discharged on December 16, 1884, a little more than six weeks after the operation, with the wound entirely healed. The cavity had apparently filled from the bottom, and as it filled the infiltration in the soft parts gradually disappeared, so that when the edges of the wound healed the resulting cicatrix had already retreated somewhat beneath the orbital arch, and the patient began to regain some power over the levator palpebræ muscle. The patient was not seen again until February 2, 1885. At this date there was complete restoration of the position and action of the upper lid, and an entire disappearance of the scar beneath the superior orbital margin. All protrusion of the eye had subsided, and the motility was completely restored, but the eyeball was still on a plane somewhat lower than that of the opposite side. Vision had improved to $\frac{20}{40+}$, and she had binocular single vision. The fundus of the eye showed nothing abnormal, except a slight discoloration of the temporal half of the right optic disc. The patient complained of a loss of sensation in the course of the supra-orbital nerve, but as this anæsthesia was limited in extent, and not very annoying, it was deemed unwise to attempt any operative interference for its improvement.

The pathogenesis of the case is somewhat obscure. The force of the blow was in the direction from below upward, and the first effect was probably a fracture or dislocation of the nasal bones at their line of union with the frontal bone, or possibly both. The violence of the injury to the bones, complicated by the extensive laceration of the soft parts, probably induced a periostitis, followed by a degenerative osteitis and caries of the nasal process of the frontal bone, which in time opened into the right frontal sinus and also extended through the thick bony septum in the median line into the frontal sinus of the opposite side. It is possible, also, that the caries extended along the floor of the right frontal sinus, in a line with the superior orbital margin, and in the course of years ended in complete degeneration and absorption of the bony partition between frontal sinus and edge of the orbit. All this time the process was extending backward, as well as laterally, into the cellular spaces and body of the ethmoid bone, and eventually the orbital plate of the ethmoid was perforated and in great part absorbed.

The patient was again seen on June 17th, and the recovery was found complete, with perfect restoration of motility of lid and eyeball, and a return of the eye to the normal plane.

THE SURGICAL AND PATHOLOGICAL ASPECTS OF GENERAL GRANT'S CASE.

By GEORGE F. SHRADY, A.M., M.D.,

NEW YORK.

No case has excited a greater interest from a medical point of vew than that of General Grant. Aside from the disease attacking a patient so widely known and so universally beloved, it has shown some features which are of surgical as well as of pathological significance. It is not the purpose of this article to treat of details of description or of treatment, as such will properly be left for elaboration by Dr. J. H. Douglas, whose constant attendance upon the patient best qualifies him for the performance of such a duty.

It is not definitely known when the throat trouble commenced, but probably it was early in June 1884, as at that time General Grant first complained of soreness in the right tonsillar region.

In October, after his return to New York from Long Branch, one of the lymphatic glands under the right angle of the lower jaw became enlarged, and he consulted his family physician, Dr. Fordyce Barker, who after satisfying himself as to the nature of the trouble referred him to Dr. J. H. Douglas for special treatment. The latter gentleman, also recognizing the serious nature of the malady, made the diagnosis of epithelial cancer, and commenced the use of palliative applications with the view of preventing the spread of the ulcerative process, then just commencing in the right posterior faucial pillar. For a time his endeavors were crowned with some success. Coincidently, however, with severe mental strain, occasioned by pecuniary embarrassment and attended with great physical prostration, it was noticed that early in December the disease took a fresh start and spread in upward and downward directions, so that in the course of the two months following, the posterior pillar of the fauces was almost entirely destroyed, the tonsillar space infiltrated, the base of the anterior pillar perforated, and the right side of the base of the tongue indurated and superficially ulcerated. This was the condition of affairs when, on February 19th, Drs. Barker and Douglas held a consultation with Drs. T. M. Markoe and H. B. Sands. The diagnosis of epithelioma was then unanimously confirmed and the judiciously conservative treatment of Drs. Barker and Douglas was fully endorsed.

On March 7th, when I first saw the patient, in consultation with Drs. Barker, Douglas, and Sands, it was found that the perforation at the base of the anterior pillar had extended so that its internal edge was converted into a mere bridle of tissue. The entire soft palate was uniformly reddened and swollen from inflammatory infiltration, and the surfaces of the right tonsillar region and adjoining portion of the vault of the pharynx were covered with a thick, consistent, yellowish exudation resembling sloughing tissue. This deposit was evidently the result of an acute process, engrafted upon the original disease, and partook in its clinical as well as physical features of many of the characters of a diphtheritic membrane. The enlarged and hardened gland under the angle of the jaw was then freely movable.

This view of the complication explains many of the grave symptoms which were subsequently associated with great prostration, but which were not directly traceable to the progress of the epitheliomatous degeneration.

Subsequent to this consultation visit an opportunity was offered the staff for examination of the microscopic specimens previously removed from the ulcerated edge of the posterior pillar of the fauces of the patient and prepared by Dr. George R. Elliott. I inspected the specimens in common with Drs. Barker, Douglas, and Sands, and agreed with them in expressing a due appreciation of the significance of the appearances presented. In other words, the microscopic examination showed the disease to be epithelioma. The appearances are correctly summarized by Dr. Elliott in his recent paper, and are properly judged by Dr. T. E. Satterthwaite. There was, in brief, a more or less lobulated appearance of the epithelial mass, with great diversity in the shape of cell elements—and marked evidences of epithelial proliferation; but, above all, there were present distinct cell-nests, and a tendency of the new cell-formation to burrow into the deeper parts of the underlying tissue. Extravasations of blood were also found in the diseased specimens.

The expediency of a radical surgical operation for the removal of the growth was discussed early in the case. It was considered that such a measure would have involved the division of the lower jaw in front of the ramus, the extirpation of the entire tongue and the greater part of the soft palate, together with the removal of the ulcerated and infiltrated fauces and the indurated glandular structures under the right angle of the lower jaw. This was considered mechanically possible, despite the close proximity and probable involvement of the tissues adjoining the large arteries and veins in the neighborhood of the ulcerations; but in the best interests of the distinguished patient the surgeons did not feel inclined to recommend the procedure. Even by such means there could be no guarantee, in view of extensive surrounding infiltration, that the limits of the disease could be reached without immediate risk to life by the severe shock to a constitution already much enfeebled.

From the time that the exudation appeared in the throat there was noticed for several days a marked depression of the vital power of the patient. Owing partly to the progress of the cancer and partly to the extra-inflammatory condition of the throat there was an increased accumulation of mucous secretion, the expectoration of which was attended with occasional attacks of choking. The latter of themselves had a tendency to exhaust the patient, and on more than one occasion alarmed his family and the public. The most serious attack of the kind occurred about 2 A.M. of March 30th. The General for a time lost his composure, and believed that he was about to suffocate. His distress was extreme. Dr. Douglas, who was summoned, called for me on his way to the patient. By the prompt syringing of the throat by Dr. Douglas the accumulated mucus was dislodged, when, as usual, immediate relief was obtained. The apprehension of a recurrence of the difficulty was so great on the part of the family, that we remained with the General until the afternoon, when another general consultation was held, attended by Drs. Barker, Douglas, Sands, and myself. The patient was found somewhat weaker, but was not considered in a dangerous condition. The area of exudation was increased, as well as the swelling of the palatal curtain, accounting for the extra difficulty of swallowing and a thickness of speech which were painfully perceptible. The pulse was inclined to be intermittent, and was decreased in volume, but there was no elevation of temperature. This weakened condition continued, despite the administration of heart-stimulants (digitalis and coca) and the careful regulation of liquid diet, until the early morning of April 1, when the patient was rather suddenly seized with an attack of fainting, and death from heart-failure seemed imminent. Dr. Douglas and myself were with him at the time. The members of the family were around the patient expecting that every moment would be his last. It was feared that he could not rally, and the farewells were said. Finally, hypodermic injections of brandy were administered, with the gratifying effect of tiding the patient over a threatened collapse. In the course of the next four hours he was considered out of immediate danger, and was able to take his liquid food.

The patient did comparatively well for the next few days, the swelling in the throat gradually diminishing, and the exudation showing a tendency to become separated. On April 7th, however, a hemorrhage from the throat occurred about midnight, which ceased spontaneously, after about four ounces of blood had been lost. The occasion for the bleeding was the detachment of a portion of the slough from the right side of the pharynx. No large vessel was implicated.

During the twenty-four hours succeeding the hemorrhage the pulse became more feeble, frequent, and intermittent, and the temperature at one time rose to 102° F. In order to relieve pain and procure sleep the patient was kept mildly under the influence of morphine, the latter being injected hypodermatically to the amount of six minims every six hours. The morphine was afterward decreased to six minims in the twenty-four hours, and but slightly exceeded that, save on one or two occasions, up to the day of his death.

The separation of the slough was anxiously awaited, and when it occurred the patient, as was expected, became much relieved of many of his more distressing local symptoms and of his depressed bodily condition. Then it was announced by the press that because the General had rallied, the physicians had erred in diagnosing the case, and consequently the patient's chances of recovery were good. Much as this happy result was to be hoped for, the stubborn fact of the existence of the original disease, and of its steady progress toward an inevitably fatal issue was painfully apparent to the gentlemen watching the case. The return of the patient's strength was not a surprise to his physicians. It was what they aimed to bring about by the treatment employed. The general exhaustion, which was in a great measure independent of the cancer, was at this time most feared, and the treatment of that condition was naturally of the first importance. But the gratifying change for the better was believed to be simply of a temporary character. Death, directly or indirectly due to the extension of the throat disease, was a question of a few months at most. The surfaces of the throat covered by the inflammatory deposit presented a clean appearance after the deposit was separated, but the primary cancerous ulcerations of the palate and tongue never changed for the better. The original disease was always there, slowly but surely progressing, resisting every treatment, defying every hope for cure, and grimly inviting the inevitable issue.

The temporary rally of the patient's strength was taken advantage of in every possible way to conserve his vital forces and make his last days as comfortable as possible. The success attending these efforts was manifested in many ways. He, however, possessed, in a remarkable degree, the faculty of repressing his feelings, bearing his

pain, and maintaining his mental composure, all of which was calculated to deceive a casual observer as to the real extent of his suffering. In the midst of this, and with a constant reminder of approaching death, he stoically gave himself up to the composition of his life-story, anxious only that he should live long enough to finish it.

The progress of the local disease was a steady one from the beginning. The ulcerations of the pillars of the fauces extended to the right side of the palatal curtain, almost destroying the latter and eating away the adjoining side of the uvula. The same process spreading to the region at the right side of the base of the tongue enlarged and deepened the ulcer there, destroyed the soft parts in the neighborhood, and burrowed its way downward beyond the reach of inspection or palpation. Toward the last the extent of the disease could only be estimated by examination with the finger in the throat, and even by that means its limit downward and backward could not be reached. The cavity at that point was irregular and deep, and was surrounded by a hard and ragged margin fading into surrounding indurated infiltration. The enlargement and hardening of the glands under and around the angle of the lower jaw continued to the last, when the superficial and deep structures of that side of the neck and face constituted a mass of cancerous disease solidly connected with the ulcers of the inside of the throat. At no time did the swelling outside threaten to break down into ulceration, but its size varied from time to time as the result of accidental inflammatory deposits. These increases in size were treated by warm applications, which quickly reduced the tumor to its original and fixed dimensions.

The loss of the palate and adjacent soft parts, with the consequent lack of perfect control of the tongue, occasioned great difficulty in swallowing. This was most painfully marked toward the end. His nourishment, which for six months was always in liquid form, was seldom taken without some choking. These paroxysms, however, became quite severe. It was only by his supreme self-control and calm determination to sustain his powers to the end that he was enabled to take his allotted quantity of food. He was compelled toward the last to hurriedly drink the entire contents of the tumbler without taking a breath. At the completion of the swallowing a choking fit would occur, which would result in a regurgitation of the last portion of the food through the mouth and nostrils. The latter difficulty was in a great measure overcome by following the suggestion of Dr. Douglas, not to attempt to swallow the last mouthful, and consequently at no time was strangulation threatened. During all his illness the breathing was not mechanically impeded by the extension of the disease into the larynx.

Just before he was transferred to Mount McGregor he rather suddenly lost his voice, never to regain it. This was due partly to thickening of the vocal cords by the inflammatory infiltration, and partly to a relaxation of the parts from general weakness.

A brief summary of the treatment is all that will be necessary to give now. Early in the disease, in order to eliminate every possible chance of error in diagnosis, the patient was placed under specific treatment, although the clinical history of the case gave only negative indications for its necessity. This treatment, although continued for a sufficient period, produced no effect in healing the ulcerations or in arresting the progress of the disease. Iodoform was used as a local application to the ulcers, as well as gargles composed of salt and water, diluted carbolic acid, solutions of permanganate of potash and yeast. A four per cent. solution of cocaine was occasionally applied to the painful parts with happy results, but it was never employed to any such excess as is generally believed by the public, nor were there any bad effects manifested from its administration at any time. The latter were carefully guarded against with the full knowledge that the drug was a new one, and that only its cautious use was admissible. Red-clover was given quite constantly, but produced no effect whatsoever upon the local disease. It only proved itself useful as a laxative and was so employed as being the least harmful of medicines of its sort for continuous administration.

His food consisted of beef-extracts, milk, eggs, and farinaceous materials, always in liquid form. In all detail matters bearing upon his food such appetite as he would occasionally manifest was the guide for any change. The rule was to deny him nothing he might crave.

During the last two days of his life he began to fail very perceptibly. On the evening of July 22d he signified his wish to be transferred to a bed. This was the first time he had left his easy-chair for purposes of rest or sleep since early in March. Dr. Sands and myself, who had been previously summoned at the final consultation, agreed with Dr. Douglas that the end was near, and that nothing more was to be done than to make the patient as comfortable as possible. The General had then lost his ability to swallow, his pulse was 120 per minute and feeble, and his respirations 25 per minute and shallow. His consciousness gradually left him at midnight. Continuing to sink, he died without a struggle at 8.08 A.M., Thursday, July 23, 1885.

Much to the regret of the entire staff, no autopsy was permitted. The family, gave as a reason for the refusal that each member was entirely satisfied with the diagnosis and treatment of the disease.

Thus ended a remarkable case. In commenting upon its features it must be conceded on behalf of scientific medicine, that everything possible in the present state of our knowledge was done to prolong life and make it as tolerable as the circumstances of the disease would admit. The diagnosis given early in the case was proved to be correct by the microscope, by the clinical history of the patient, and by the fatal issue. Appreciating the usual course of the disease, the staff at no time set any period for death until within the last twenty-four hours; nor did any member of it at any time during the patient's illness give the slightest reason for alarming the public by sensational rumors. As it is, the disease had a much shorter course than usual, owing to the prostration of the patient's system, dependent in a great measure upon other causes.

The cause of the disease in this case is largely conjectural. Epithelioma, as a rule, starts from local irritation, and, unlike other forms of cancer, is not dependent upon hereditary predisposition to the disease. There must, however, aside from this, be a latent tendency toward cancerous troubles which is more pronounced in some individuals than in others, otherwise we should be unable to explain why simple and continued irritation would induce the disease in one case and not in another. It is, however, quite probable that the irritation of smoking was the active cause of the cancer in General Grant's case, or, at least, it is fair to presume that he would not have had the disease if his habit had not been carried to excess. This assumption is made in the face of the fact that, of the thousands who smoke, but a very small proportion suffer from the disease.

As far as can be estimated, the cancer commenced only nine months before death. Fortunately the breathing was never affected by the involvement of the parts around the windpipe, nor was there any impediment to swallowing by the extension of the growth to the œsophagus. Both of these conditions might have obtained had the patient lived long enough to give an opportunity for the local disease to gain sufficient headway. The cancer presented an unusual feature in first invading the side of the throat rather than that of the tongue, as the latter is most frequently the original seat of this disease The appearance in the throat of a sloughing process during the regular progress of the cancer was a circumstance worthy of note, and explained much of the exhaustion of the patient during one of his critical periods. If it had not been for this accidental complication the

epithelioma would have taken its usual course, and the public would not have mistaken the extension of the inflammatory process for that of the cancer, and would not have been ready to believe that the original disease was disappearing when the sloughy deposit was discharged. The patient at the time was better of the complication, but not of the cancer. The latter never changed but for the worse.

The occurrence of hemorrhage from the erosion of the walls of the larger vessels in the neighborhood was believed to be eventually possible, but was at no time seriously feared, as nature had thrown out her safeguards in the shape of dense deposits around the branches of the carotid artery and jugular veins.

Although there was more or less constant pain of a gnawing character, the patient was happily spared that agony of suffering which is often associated with the invasion of the deeper parts of the tongue by cancerous disease. Had the latter occurred, it was proposed to divide the sensitive nerve of the tongue (gustatory) through the mouth, which operation oftentimes gives absolute relief. Such pain as existed, however, was kept under control by cocaine and morphine, so that the last wish of the patient that his death should be a peaceful one was fully realized.

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Clinical Department.

ENORMOUS DOSES OF OPIUM IN PERITONITIS.

Dr. A. L. Haines sends the following interesting notes: May 4th I was called to see Norman W——, aged fourteen, who two days before had been subjected to severe atmospheric conditions.

Early history.—Four years before suffered with severe attack of acute articular rheumatism. Since, had no severe sickness; but unable to bear muscular exercise like most boys of same age.

Symptoms.—Complained of wandering pains in chest, arms, and limbs, especially in knee- and wrist-joints; also some in lower part of abdomen. Considerable nausea existed, and he had vomited several times. On examination, wrist- and knee-joints were found to be slightly swollen, and skin over them was red and glairy. Respirations were short and catching in character. Tongue was covered with a white coating. Temp., 100°. Pulse, 80—small, slightly hard, and irregular. A distinct purring thrill, with the other evidences of a mitral disease of the heart, was found on examination. There were considerable distention and tympanites over the hypogastric and right inguinal regions. This latter condition had escaped the attention of the attendants in the presence of the more active rheumatic symptoms.

The diagnosis of commencing peritonitis was made. The patient had been given a cathartic the day before, with the result of obtaining a few hard masses from the bowel. A hot flaxseed poultice was ordered over the bowels, and opii, gr. j., was given every three hours, and quinia sulph., gr. j., the same, except at 8 P.M. and 8 A.M., when he was given gr. v. of the same drug. In twenty-four hours I saw patient again. The tympanites and swelling over bowel had markedly increased. Pulse, 100, and temp., 101°. Vomiting had taken place several times. Patient had now assumed the characteristic position—on back with limbs flexed. These symptoms continued to increase in severity; and on the third day I saw him a very marked case of general peritonitis was to be seen. Poultices were now changed to Indian meal and hops, moistened in an alkaline solution of lye. These were made of generous size, and were covered with oiled silk and flannel. The doses of opium had been steadily increased, in order to keep patient narcotized, until they had grown unwieldy. Morphia sulph. was now substituted; gr. ss. of this drug was given, to commence with, every hour. As this was found insufficient, the dose was increased from time to time in order to keep patient completely under its influence. At the end of sixth day the patient was receiving gr. ij. to v. every half hour. This amount was scarcely sufficient to control patient. Having the case under immediate observation, I gave at one dose gr. v. of morphia and then repeated this dose in half an hour. The respirations came down to twelve per minute, and I was unable to arouse patient for two hours. Temperature at this time 103°, and pulse 110. When turning patient over to care of nurse, gr. ij. to v. was given every half hour, according as the respirations began to increase or decrease in frequency. From sixth to ninth day patient was in a critical condition; temp., 103°; pulse, 120, small and irregular. Tongue dry and brown; sordes on teeth; abdomen distended to the utmost. Patient continually sliding down in bed. Turpentine stupes were now employed along with poultice. Judicious stimulation with brandy was commenced from the very first sign of heart-failure. At the end of eighth day a slight softening was detected along direction of transverse colon, and from this time the tympanitic condition gradually subsided, and on the fourteenth day patient was convalescent. On ninth day there was a slight movement of bowels from natural causes.

The above case was interesting to the writer in many respects. But the most noticeable point was the toleration on part of patient of such large doses of morphia and so much of it. During the activity of the disease (first ten days) the patient received six one-eighth ounce bottles of morphia, and during the period of greatest activity (sixth and seventh day) he received one bottle of morphia, same size, in twelve hours. This large quantity of morphia could not have been needed to relieve the pain, nor could its object have been to produce a paralysis of the muscular coat of the bowels, as once taught, as that condition already existed. That this drug acted medicinally we have proof in its being so well tolerated.

The chief danger of this disease, and in fact of all serious inflammations, is the shock to the nerve-centres, and the consequent depression to the vital organs, especially the heart. Most cases of serious inflammations that result fatally do so because of this depression. These cases are of too rapid development to cause death from exhaustion. If death results it is generally before the tenth day. Almost every system, unless seriously undermined previously by disease, has vitality in reserve sufficient to carry them far beyond the period. Neither do these patients die from high temperature, as generally the temperature is not above 103°, and in the majority of cases it is below that degree. Death in most cases would seem to result from shock rather than from other causes. In counteracting this shock to the nerve-centres is to be seen the chief use of opium in this and allied affections. The danger of surgical operations from shock is greater, perhaps, than from any other cause. Take, for example, such operations as lithotrity, where death often results from this cause. In amputations death often results when there is scarcely any hemorrhage at all. It is a well-demonstrated fact that nearly all surgical operations are better borne when a full dose of opium is given.

The Cholera in Italy in 1884.—The Italian Government has just published an official report of the cholera epidemic of last year. Eight hundred and sixty-three communes, with a population of 5,771,000, or about one-fifth of the kingdom, were visited by the scourge; 25,587 cases were reported, 14,198 of which terminated fatally, a mortality of about sixty per cent. In Naples, with a population of 945,000, there were 15,927 cases and 7,968 deaths.

Progress of Medical Science.

TREATMENT OF NEURALGIA BY OSMIC ACID.—This subject was recently discussed at the meeting of the American Neurological Association. *The Lancet* of June 13, 1885, gives the following account of Dr. Schapiro's observations concerning the utility of osmic acid in inveterate neuralgia. The author's paper was read before the Medical Society of St. Petersburg. His observations include eight cases of trigeminal neuralgia (three males and five females). The age of the patients varied from thirty-eight to sixty. In every case the disease was of a very severe type and of long standing. The result of the treatment was complete cure in five cases (three females and two males), great alleviation of the pain in two cases, and no success at all in one case (female). The number of injections made in each was from one to twelve (twenty in one case), five to ten drops being injected every time. The duration of the treatment was from one to sixty days. Dr. Schapiro adopts a modification of Neuber's 1 per cent. aqueous osmic solution on account of the osmic acid soon undergoing decomposition in a watery solution. After a whole series of combinations, he concluded that an addition of glycerine to the watery solution prevents for a long time osmic acid from undergoing any change. In not one of the cases treated by him was an injection followed by any ill effect. The patients are now under the author's observation (two to six months after the commencement of the treatment).

NEPHRECTOMY; ITS INDICATIONS AND CONTRAINDICATIONS.—Dr. S. W. Gross, in a paper in the July number of *The American Journal of the Medical Sciences*, based upon a study of nearly four hundred and fifty cases of different operations on the kidney, presents a careful analysis of all the facts pertaining to the surgery of this organ, and arrives at the following conclusions: 1. That lumbar nephrectomy is a safer operation than abdominal nephrectomy. 2. That primary extirpation of the kidney is indicated, first, in sarcoma of adult subjects; secondly, in benign neoplasms at any age; thirdly, in the early stage of tubercular disease; fourthly, in rupture of the ureter; and, lastly, in urethral fistula. 3. That nephrectomy should not be resorted to until after the failure of other measures, first, in subcutaneous laceration of the kidney; secondly, in protrusion of the kidney through a wound in the loin; thirdly, in recent wounds of the kidney or of the ureter, inflicted in the performance of ovariotomy, hysterectomy, or other operations; fourthly, in suppurative lesions; fifthly, in hydronephrosis and cysts; sixthly, in calculus of an otherwise healthy kidney; and, finally, in painful floating kidney. 4. That nephrectomy is absolutely contraindicated, first, in sarcoma of children; secondly, in carcinoma at any age, unless, perhaps, the disease can be diagnosticated and removed at an early stage; and, thirdly, in the advanced period of tubercular disease.

THE SURGICAL TREATMENT OF CYSTS OF THE PANCREAS.—In an article on the surgical treatment of cysts of the pancreas, Dr. N. Senn, of Milwaukee, in the July number of *The American Journal of the Medical Sciences*, presents a full report of a case of retention-cyst of that organ which has recently come under his observation, and, at the same time, summarizes, in a compact form, the clinical history of similar recorded cases, which serve as a basis for some general remarks. Of all abdominal organs the pancreas has been least frequently subjected to surgical treatment, for which its anatomical location, as well as the obscurity of its affections, furnish a sufficient satisfactory explanation. Situated high up in the abdominal cavity, and hidden behind such important organs as the stomach, omentum, and transverse colon, it is the least accessible of all abdominal organs, and on this account its affections, wrapped in obscurity, have for the most part constituted objects for empirical medication. The relation of this gland to the surrounding organs, and its great distance from the anterior wall of the abdomen, the only point of approach, necessarily offer serious obstacles to diagnosis and direct treatment. From a diagnostic point of view, another great difficulty is our want of positive knowledge concerning the physiological functions performed by this gland in the process of digestion. As the symptomatology of all affections of the pancreas is always obscure, and a probable diagnosis can only be made in cases where the gland has become considerably enlarged by disease, it is apparent that our present clinical knowledge is limited to diseases which increase the size of the organ to a sufficient extent to permit its detection by palpation. Primary malignant disease of the pancreas, when it has advanced to such an extent that its presence can be diagnosticated with certainty by physical signs, will have invaded the adjacent tissues to such a degree as to preclude the advisability of an operation; consequently the efforts by the surgeon, for the present at least, must be directed exclusively toward the recognition and treatment of benign affections of this gland. Clinical experience does not extend beyond an imperfect knowledge of cysts of the pancreas. The pancreas, like other secretory organs, is prone to become the seat of cystic tumors, the result of obliteration or obstruction of the common duct, or one or more of its branches. Cysts originating in this manner are true retention-cysts, containing the physiological secretion from the distal portion of the gland tissue, with perhaps accidental products, such as altered secretions, blood, and the products of inflammation. The author concludes his study of the subject by submitting the following propositions: 1. Cysts of the pancreas are true retention-cysts. 2. Cicatricial contraction or obliteration of the common duct or its branches and impacted calculi are the most frequent causes of cysts of the pancreas. 3. A positive diagnosis of a cyst of the pancreas is impossible; a probable diagnosis between it and some other kind of cysts amenable to the same surgical treatment is adequate for all practical purposes. 4. The formation of a pancreatic fistula under antiseptic precautions recommends itself as the safest and most expedient operation in the treatment of cysts of the pancreas.

BLISTERS IN HEAD-SYMPTOMS PRODUCED BY CRANIAL LESIONS.—Dr. Handfield Jones records two instances of cerebral symptoms from long previous injury to the head. The first case was that of a man aged thirty-four, who received a cut on the right forehead sixteen years ago, and for the last two and a half years suffered from pain round the right eye and headache all over the head, which was generally brought on by exertion. He had frequent attacks of giddiness, and occasional fits of unconsciousness. The patient was under Dr. Jones' care for about two months, during which time ten blisters, at various intervals, were applied to the forehead, producing each time almost instant relief from pain for many hours, and sometimes days. The second case was that of a navvy, who received several wounds on the scalp through some bricks falling upon him. About two years after the accident he became subject to attacks of giddiness. In this case eighteen blisters (in all) were applied to the head, the result being a complete recovery from all his bad symptoms; and when he was seen by the author, fourteen years afterward, there had been no return of the attacks. —*London Medical Record*, June 15, 1885.

THE DOCTORS OF NEW YORK, says a second-hand Sixth Avenue book-dealer, are the only men who have the money, the taste, and the inclination to buy books. If there is anything good in the way of a book or a print they are sure to find it. The doctors are my best customers.

THE MEDICAL RECORD:

A Weekly Journal of Medicine and Surgery.

GEORGE F. SHRADY, A.M., M.D., EDITOR.

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THE RELATION OF THE TARIFF TO MEDICAL WORK.

THE matter of the tariff and the relation it bears to his work seldom enters the mind of a physician.

It would seem that the first duty of a government would be to protect the health of every individual under its care. One would naturally suppose that one of the methods of attaining this method would be to educate the physicians of the nation to the uttermost. This apparently is the last thing the Government thinks of. Instead of encouraging such education by patronage and increasing the facilities, as is the case with some European governments, it throws obstacles in the way. The doctor must pay twenty-five per cent. duty on every foreign book that he purchases.

It is possible that if this tax were removed, that our American books would be less read; but it is hardly probable that the dust would accumulate more thickly upon them than it does now as they lie on publishers' tables and on library shelves. If the medical man gets broader ideas and wider views, as might happen, what would be the result? A better knowledge of how to treat his cases, how to restore his patient to a condition of health.

If a physician wishes European instruments, either because they are not made in this country, or if made, not of so good or useful material or form, he must pay, if metal or glass enters into their composition, forty-five per cent. duty; if soft rubber, twenty-five per cent.; if gum, thirty-five per cent.; if silk, fifty per cent., making the price from one-fourth to one-half as much again as they could be purchased for in the country in which they were made. Are these articles of luxury, without which one could easily accomplish the purpose? No, they are often instruments familiarity with which either improves the possessor's knowledge, or will increase his power of performing difficult operations successfully. It has been said so many times that it has become trite, but is nevertheless truthful, that the physician holds life and death in his hands. Should not, therefore, the Government, instead of demanding tribute and withholding thereby from those whose incomes are not abundant the means of perfecting themselves in their exacting calling, rather facilitate the procuration of books and instruments which, in reality, or according to individual opinion, will tend to this end.

The makers of medical and scientific instruments used in medical education are a small class in this country, and if their industry should suffer on account of the withdrawal of the protection which they now enjoy, their loss would be small in comparison to the great gain which might result to individual health and well-being because of doctors who, through imported ideas and instruments, have learned facts potent for good to their patients.

This is not a plea for foreign ideas rather than American, but for freedom for the physician to receive both on as nearly the same terms as possible, so that if there be anything in this country or out of it which will help suffering humanity, he may learn of it as speedily as possible, and at as little cost as possible.

It is ill becoming a Government which is supposed to have all the interests of its subjects at heart—and what interest is there greater than health?—for the sake of the small advancement to be obtained in commercial prosperity to cripple even in the smallest way the efforts of those which are exerted in this direction. We cannot but think that, coming in equal competition, instrument-makers would strive more than they do now to perfect their work, and the removal of the tariff for these things would be thus beneficial to the productions of the country.

It may be stated that colleges and hospitals can obtain instruments free of duty. It is so, but often with so much red tape and waste of time that the importers would prefer to pay the duty, as, indeed, an instrument-maker told us, they often did, than to endure the delay and vexation incidental to obtaining a permit. The law expressly states that no such instruments should be for the individual use of the physicians connected with the institutions. It is blindness which does not see that the advancement of the individual is the advancement of the whole, and that the need of Government patronage is as great for him as for the institution whose aim it is to educate these individuals.

In the matter of duty on drugs, on which there is an ever-varying tariff, possibly it is not such an injustice, if it forces the raising and preparing of them in this country in as good if not in a superior manner; but whatever interferes with the instruction of the physician in how to use these drugs to obtain the best possible results for his patient is to be greatly deplored, and will in the end prove a most short-sighted policy.

THE MEDICAL PROFESSION AND THE PALL MALL GAZETTE EXPOSURES.

THERE is one point in the recent exposures of London vice which seems to have attracted but little attention, and which we think ought not to be allowed to pass without a word of special condemnation. We refer to the part taken by certain medical men in granting the certificates of virginity, supposing, as one can hardly doubt, that these were genuine and not forged by the procuresses. There are, of course, rogues in every walk of life, but that men of a noble profession, whose aim is, or should be, to relieve misery and to advance the cause of humanity, should lend their names and thus give their sanction to such a horrible crime is almost incredible. One can hardly say which was the greatest villain, the retired physician who sacrificed annually between seventy and eighty virgins upon the altar of his lust, the procuress

who furnished the material for sacrifice, or the, presumably, impecunious practitioner who was willing, for a consideration, to certify to the fitness of the victims for the sacrifice. It is almost a pity that the matter was not taken into the courts so that the names of these brutes might be made known, and their bearers branded as unfit for association with decent men.

THE OLEOMARGARINE DECISION.

The reversal of the decision of the lower courts by the Court of Appeals in the recent oleomargarine suit, was not entirely unexpected, unless in the case of the officials of the Dairy Commissioner's office, but the decision seems to have put a temporary stop to efforts to destroy the traffic, and future efforts will have to be directed rather to discovering fraudulent sales of oleomargarine for real butter rather than to preventing all sales of the imitation.

The principle involved in the decision is one of great importance, and will have a far-reaching effect. It has been the theory on which many laws have been enacted in recent years to label a measure a health one, and that would enable the law to run the gauntlet of all the courts. The Tenement-house Cigar-law decision and now the oleomargarine decision show that a law must in reality be proven to be positively necessary for the prevention of health, or else individual rights cannot be overridden. In the case of the oleomargarine law it is very difficult to prove that pure oleomargarine is unhealthful, and the court held that to manufacture or sell such an article was not improper.

THE POVERTY OF DR. WARBURG.

Shall a physician keep secret his formulæ?

The answer to this question can be made promptly and emphatically in the negative. Whatever injustice may fall upon the individual, it would be demoralizing to the profession and injurious to the public if physicians attempted to make secrets of their favorite and most helpful formulæ.

We make this criticism as introductory to the case of Dr. Warburg which has just been brought up in the London medical papers. Dr. Warburg, who compounded Warburg's Tincture, is now a poverty-stricken old man. Professor W. C. Maclean, formerly of the Netley Army Medical School writes:

"Some years ago I appealed through the press on behalf of Dr. Warburg, to whom the people who serve in malarious climates are indebted for the most powerful febrifuge known to the medical profession, and which has saved many valuable lives. I have before me a letter from the lamented General Gordon, dated Khartoum, October 25, 1876, when Governor of the Soudan, addressed to Dr. Warburg, in which he says: 'I am (D. V.) coming home on leave (it would be for good were it not for your medicine, but I have such confidence in it that I look on returning with no dread), and will give you an order for £20 worth.' I urged Dr. Warburg to make its composition known. In compliance with this advice, Dr. Warburg came to Netley, and in the laboratory there made up a large quantity of his tincture, giving me at the same time his formula for publication, which I made known to the profession in the pages of *The Lancet* and *Medical Times*. I regret to say that this well-intended act of mine was followed by disastrous results to the inventor. It is now made and sold by druggists without any profit to Dr. Warburg, and I invite such of your readers who have derived benefit—perhaps had their lives saved—by this remedy to assist the man who has given to tropical medicine a powerful weapon to contend with a disease that kills twice as many victims as cholera and small-pox put together. The Government of India some time ago took the very unusual step of marking their sense of the value of Warburg's tincture by a grant of £200 to the discoverer. Dr. Warburg is now upward of eighty-one, and is in embarrassed circumstances."

The medical profession demanded of Dr. Warburg his secret; he gave it, and now the druggists make the money, and Dr. Warburg is left a poor man. It belongs to the medical profession to relieve the poverty which it has brought about.

SUPPLY AND DEMAND.

The demand for the degree of M.D. on the part of dentists has been met by the College of Physicians and Surgeons of Baltimore. This institution announces that graduates of the Baltimore College of Dental Surgery, who have also attended lectures on materia medica, anatomy, and oral surgery, will be entitled to graduate in medicine after attending one additional course of lectures on passing a successful examination.

This amalgamation of schools has another advantage—it swells the graduating list of the Baltimore College of Physicians and Surgeons.

We have heard that a dental school nearer home than Baltimore, or Hoboken even, gets the degree of M.D. in this way whenever any of its students feel the need of it.

THE BRITISH MEDICAL ASSOCIATION.

The meeting of the British Medical Association, which occurred this week and of which we present a cabled report, was a well-attended and interesting meeting. The character of the papers seems to have been so far largely clinical.

The most important event was, doubtless, the decision of the Association to erect a building for itself, at a total cost, probably, of over $150,000. Such a procedure will doubtless in the end prove economical, and will certainly add to the stability and power of the organization.

THE INTERNATIONAL MEDICAL CONGRESS.

The fact is unmistakable that the present organization of the International Congress seems gradually falling to pieces. Its best and most representative men have withdrawn. Opinions from the other side show that no confidence or sympathy will be felt in the position taken by the American Medical Association. It is useless to deny that unless something radical is done the Washington Congress will be simply a humiliation of American medicine before the world.

Is the Association willing to take the responsibility of bringing this about? We trust not, when, by a manly

and sensible acknowledgment of a mistake, the whole matter can be adjusted.

There is no quarrel between the East and West, nor do any but a few care for changes in the *personnel* of the present Executive Committee. We see no reason why, as has been urged, they should resign. Let them remove the medico-political issue and we can assure them that the whole profession will manfully stand by them in all other points.

News of the Week.

THE INTERNATIONAL MEDICAL CONGRESS.—Perhaps, with the exception of one or two journals, the medical press, both in the United States and in England, has disapproved of the action of the American Medical Association in overthrowing the work of the original Committee on the Organization of the Congress. In fact, we are able to mention at this time but one prominent journal which has sustained the Association in its course, and this is the journal owned by the Association and conducted solely in its interest. The present outlook for the Congress admits of but one opinion, which is this, that the Association has committed a serious blunder and has shown itself incapable of reorganizing or conducting the Congress under its auspices. It seems clearly the duty of the Association to resign this matter into the hands of the general profession. The Association has so completely forfeited the confidence of the best minds in the profession, and has so antagonized the medical press of the country, that it seems a mistaken policy for it to attempt to proceed with the work of reorganization.—*Maryland Medical Journal.*

"THE WASHINGTON CONGRESS IN DANGER."—Under this title we copy the following from a leading editorial in the *Medical Times and Gazette* of London: "Those who have looked forward to taking part in the next International Medical Congress, and have counted perhaps on making personal experience of that friendliness and hospitality of which every English doctor who has yet crossed the Atlantic has brought back such golden report—yes, and not only those, but every practitioner to whom the reputation of his profession is dear, will have read with intense surprise, if not distress, the intelligence we published last week, that the Washington Congress is in imminent danger of falling through. We are sorry to announce that our worst anticipations are in process of realization. . . . We can only hope that the sound sense for which our American cousins are so distinguished will prevail, and that the decisive action of the Philadelphia practitioners will rouse the mass of the profession in America to step in, and to decide by overwhelming numbers before it is too late, that old controversies shall be sunk, that old ill-feeling shall be buried, and that no one shall be allowed to turn partisan spirit into a ladder for his own elevation at the expense of the reputation and good-fellowship of the profession to which he belongs. We do not wish, and we hope no one on this side the Atlantic will attempt, to revive the memories of the celebrated dispute on the Codes. We believe that the late Dr. Panum, the lamented President of the Copenhagen Congress, distinctly insisted, when the invitation to America was accepted, that the Code question should not be raised; and we feel sure that a very large majority of English and Continental practitioners will refuse to cross the water if this understanding is not rigidly kept to. They will feel, too, that if they go to Washington they can only go as the guests of an undivided profession. A Congress from which the most distinguished representatives of American medicine were excluded or had withdrawn, would not be worth going to as a scientific meeting, while the remembrance of the bitterness and heart-burnings which had attended its organization would rob its social distractions of all their charm. It would be like feasting with a man, while his wife, unjustly divorced, stood in the street watching. We can assure our American readers that in the present case the best English sympathies will be with the wife. The men whom English visitors, if they go, will go to see and hear, are the very men who have been elbowed out of the Congress. The scientific success of a Congress does not depend on numbers, but on quality. The profession in America is no doubt rich in numbers, as well as in scientific activity, but it is not so rich that it can afford to play all Europe with only pawns on its side of the board."

NAVY NEWS.—Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service for the two weeks ended July 25, 1885. Surgeon C. S. D. Fessenden, leave of absence extended eight days on account of sickness, July 20, 1885. Passed Assistant Surgeon Fairfax Irwin, granted leave of absence for ten days, July 14, 1885; to inspect unserviceable property at St. Louis, Mo., July 15, 1885.

CHLOROFORM POISONING.—Dr. Llewellyn Eliot, of Washington, D. C., writes concerning his paper on "Chloroform Poisoning": "In table, Case 2, 30 grs. should be 30 gms.; in table, Case 5, 3 ivss. should be 3 v. In abstracts, Case 49, one gramme should be gr. ij."

PROFESSOR J. W. WRIGHT, M.D., of New York, has resigned as Professor of Clinical Surgery, University of Vermont.

MEDICAL EDUCATION.—In a learned address, delivered at Albany before the University Convocation, July 9th, on Medical Education, Dr. William H. Watson asks: "What, then, should constitute the proper conditions of medical licensure in the State of New York? and answers: 1. A fairly liberal preliminary education. 2. Four years of professional study. 3. Examinations and license by an impartial court appointed by the State." In regard to the last point, Dr. Watson says: "A single paragraph of law would, by making the law of 1872 compulsory, convert it into a system as effective as the German Staats Examen, which, in the judgment of the speaker, is by far the most efficient system in the world. We firmly believe, therefore, that some modification of this law, made compulsory, will at no distant date revolutionize the system of medical education in the State, for the following reasons: First, it cannot, if made compulsory, fail to accomplish the object which all educated men so much desire—the elevation of the standard of medical education in this State. Second, while it confers no special or peculiar privileges upon a class, yet the degree will be an assurance to the public of the qual-

ifications of all who shall attain it, and will, therefore, be a legitimate passport to professional success. Third, the provisions of such a law will not in any way conflict with the vested rights and privileges of the medical colleges. It will, however, furnish an inducement to them to increase the thoroughness of their instruction, and to advance their standards of graduation, since in course of time that institution would attain the highest reputation from which the largest number of graduates should have obtained this degree. Finally, we believe that no other measure can be devised which would so powerfully tend to the advancement of sound practical knowledge among the future members of the medical profession, while its liberal, impartial, and entirely catholic provisions would leave no reasonable room for objection, and would eventually commend it to the good sense of the people of the State."

THE FAITH-CURE FOR CHOLERA.—The correspondent of the *British Medical Journal* at Valencia, Spain, writes: "There have suddenly come into our city four 'apostles' of 'faith-healing,' who have gathered crowds around them. It is said that numbers have been healed of cholera. They are all poor men, receive neither money or gifts for their reward, only they accept a little food wherever they are at meal-time. They sleep in the fields at night, and beg to be allowed two hours out of the twenty-four for sleep and prayer. They belong to Andalusia and Jaen. They gently rub the abdomen, then place a jar of cold water on the mouth of the sick, exhorting them earnestly to put faith in God with all their mental or soul power, at the same time reading out from Scripture several passages; then they pray and breathe over them. It seems there are several of them scattered about. They never interfere with the medical man's duties."

DR. FEHLING, of Stuttgart, well-known for his invention of "Fehling's Solution" for testing for sugar, died on July 1st, in his seventy-third year.

FERRÁN'S DEFENCE OF HIMSELF.—The *Progrès Médical* contains a full account of M. Brouardel's experiences in Spain with Ferrán, but adds nothing new to what we have published. The Paris correspondent of the *Philadelphia Medical Times* writes that Dr. Ferrán gave the following answer to the Commission: 1. That he refused to make known to them his process of attenuation of the virus of the cholera. 2. That he would allow them to examine his liquid in his *own* laboratory, but that he would not allow a drop of it to be taken away. 3. He proposed to the Commission that they would make a culture of the bacilli from the cholera-dejections and hand it to him, when he would attenuate it and return it to them. The Commission refused, and returned to France. It is only fair to give Dr. Ferrán's reasons. He writes a long letter to justify his views. He says: "I commence by declaring that in regard to the prophylaxis of cholera there are two points of view that are quite different. The first one is the effects produced by the vaccination. This is the one that really interests humanity; and the second one is the manner in which I make the attenuated liquid. This last is quite apart from the first. What interests all the world is, Do the inoculations practised with my method really prevent cholera? and I claim that they do. That the second part interests all the world I do not believe, and I have particular reasons for not giving up, at present, my secret. After having worked a long time at these studies I submitted my results to my Government, but I was received with a silence and an opposition that was trying. I received no help except from a few friends. I sacrificed all I had—my health, my practice, and what little resources I had—to find not the slightest assistance, even after I had proved the great importance of my discovery. I do not refuse to show my process to all the world if the Government will recompense me in some slight way for all my trouble, as the German Government did Dr. Koch. All the glory in the world cannot recompense me for the pain I should feel if I should leave my children in poverty."

MEDICAL WOMEN IN INDIA.—The association established at Bombay, about two years ago, for bringing out medical women from England, for the treatment of zenana females, have published their first annual report. It appears that over two hundred thousand rupees have been subscribed, a dispensary started, a hospital put under way, and that two medical women have already been at work, treating one hundred to three hundred patients daily.

THE INTERNATIONAL MEDICAL CONGRESS.—The Cincinnati members of the organization, embracing leading members of the profession in that city, have formally withdrawn, as have also Professor E. S. Dunster and Dr. Henry Sewall, of Ann Arbor, Mich. In so doing they say: "In taking this step we do not intend to criticize the Committee for their action. On the contrary, we think that, handicapped as they were, they did their work remarkably well. But we do object to the action of the American Medical Association, at its New Orleans meeting, in introducing into the question of the organization of a congress for scientific work an element that has no more pertinency to such a purpose than the matter of a man's religion or his political views."

INTEMPERATE ILLINOIS PHYSICIANS.—We can hardly believe that the following item, vouched for by the *Journal of Inebriety*, is true. If it is, we must recommend St. John or the Salvation Army to our Illinois brethren. Says the *Journal* in question: "A Chicago physician sends us the following: The State Board of Health of Illinois reports the death of two hundred and two physicians. Six are attributed to suicide, five are recorded as coming from the accidental overdose of morphia, and two from an overdose of chloral. Over thirty of this number were known to use spirits to excess. He thinks that twenty-five per cent. of all physicians who die under forty may be classed as victims of alcohol or other narcotics."

A MEDICAL CURIOSITY — BALFOUR'S DISEASE, OR CHLOROMA.—A disease of which only eleven cases have ever been observed must have interest purely as a curiosity. Chloroma was first described by Balfour in 1834. Since that time ten cases have been reported, and now an eleventh case has been observed by Gade in Christiania. The subject was, as is invariably the case, a child, a little girl of five years of age. The first symptoms

were deficiency of blood, a tumor of the left cheek, toothache, otorrhœa, singing in the ear, deafness, and exophthalmos, which gradually increased. Afterward fever and extreme prostration supervened, and she died in about two months. At the autopsy, numerous yellowish-green tumors of fibro-sarcomatous structure were found in many different parts of the body, more particularly on the periosteum. They were found also on the dura mater, in the liver, colon, lateral ligaments, and kidney, and even in the marrow of the long bones. On the legs a number of dark spots were seen, some of which contained a soft greasy substance. The origin of the greenish coloring-matter was thought by Otto, and Gade agrees with him, to be in the fat-granules, numbers of these being found in the cells, and so to be independent of both bile coloring-matter and hæmatin.

THE GENERAL VERDICT.—The International Medical Congress is becoming moribund.

ANOTHER HONOR FOR PASTEUR.—The Barotte prize of 3,400 francs, awarded to the inventor of the most important and useful invention for agriculture, has been awarded to M. Pasteur.

THE INSTITUTE OF HEREDITY AND HYGIENE OF THE WOMAN'S CHRISTIAN TEMPERANCE UNION is the modest and unassuming title of a new society recently organized in the solid little State of Vermont. We are glad to see "Institutes" and other evidences of scientific progress, but we must give a caution to a society that starts off with such an intemperate length of name as the above. One must not think that because he read papers at an "institute" that he is therefore wise and scientific. The fact is such a name as the above suggests greatly a party of pseudo-scientific sentimentalists. Get rid of it, therefore, and prosper.

NOT THE CONSULTANT.—Dr. A. Y. P. Garnett, of Washington, D. C., has taken the trouble to send us a discourteous note denying our conjectural statement that he was called in consultation with the homœopathic physician attending Mrs. Bayard. Having heard a rumor to the contrary, we take the opportunity now of begging Dr. Garnett's pardon for supposing that he would be called in consultation in this case.

PROFESSOR VAN ERMENGEN, of Brussels, who went to Spain to study Ferrán's methods, makes a similar report to that of the French Commission.

THE DIFFICULTIES OF BECOMING A SUCCESSFUL PHYSICIAN.—The press of competition is so fierce in the present over-crowded state of the medical profession, that unless a man has some peculiar and decided advantage over the general run of his fellows, he stands no chance of coming to the front. Something more is necessary nowadays for success in the higher walks of medicine than mere general ability. Supreme talent will, of course, ultimately find its level, unless kept down by accident or misfortune; but for the average clever man there is little prospect of brilliant success unless he has (or can persuade the world he has) the power of doing some particular thing better than any one else, or at any rate pre-eminently well.—*Dr. Morell Mackenzie, in the Fortnightly Review.*

Reports of Societies.

British Medical Association.

FIFTY-THIRD ANNUAL MEETING.

Held at Cardiff, on Tuesday, Wednesday, Thursday, and Friday, July 28, 29, 30, and 31, 1885.

(DIRECT CABLE TO THE MEDICAL RECORD.)

TUESDAY, JULY 28TH—FIRST DAY.

President: JAMES CUMING, M.D., F.K.Q.C.P., Professor of Medicine in Queen's College, and Physician to the Royal Hospital, Belfast.

President-elect: W. T. EDWARDS, M.D., F.R.C.S., Physician to the Glamorgan and Monmouth Infirmary, Cardiff.

The fifty-third annual meeting of the British Medical Association was held at Cardiff, the chief city of Wales. The general session was opened Tuesday morning by the retiring President, DR. JAMES CUMING, who made a brief address thanking the Society for the honor it had conferred upon him, and expressing gratification at the progress and prosperity of the Association, especially in the amount of scientific work done.

Upon concluding his address, a vote of thanks was moved by MR. MCNAMARA, seconded by MR. HUSBAND, and carried.

DR. BALTHAZAR FOSTER, President of the Council, then moved that the report of the Council (published in the *British Medical Journal*) be adopted. This motion was seconded by MR. POWER.

A long discussion then followed with regard to the project of

BUYING A SITE AND ERECTING A BUILDING

for the use of the Association. Those opposing the project said that the estimated cost of the site was $75,000, that of the building $50,000, making a total of $125,000. In reply to this charge of great expense, it was said that the Association absolutely needed larger premises; that it would be cheaper in the end for it to do its own printing; and, besides, it could probably get a building at a less cost than that estimated. Finally it was voted to adopt the Council's report and authorize it to buy or lease a site and erect a building thereon for printing and publishing the *Journal*, with offices, council-chamber, reading-rooms, etc.

The President-elect, DR. W. T. EDWARDS, then delivered the

ANNUAL ADDRESS.

After having expressed his thanks for the honor conferred upon him, the speaker, in behalf of the profession of Cardiff, gave a cordial welcome to the visitors. He then gave some description of Cardiff. It was, he said, the age of great towns, and Cardiff had, owing to its mineral resources and other natural advantages, become one of the greatest of them. If, however, the estimates

were correct, and all the coal of that region were consumed in the next hundred years, Cardiff would soon collapse. Some account was given of the Cardiff schools, hospitals, and of Cardiff sanitary work. Prevention, he said, was not only better but cheaper than cure. The health officer of to-day stands, as did the Hebrew priest of old, between the living and the dead. Cardiff had many historic memories connected with it. King Arthur was said to have been born within its walls.

The rapid growth of the British Medical Association was eloquently described. It had now, he said, become a power in the country, socially, politically, and morally.

Dr. Edwards enumerated some of the additions to medical science and art that had been made during the period of the society's prosperity. Such were chloroform, ether, iodoform, the bromides, the immense advance in our knowledge of disease-germs, the introduction of antisepsis, etc.

The speaker, in conclusion, gave some statements showing the economy of preventive medicine. The cost of a single ironclad would, he said, save many lives.

At the conclusion of the address, a vote of thanks was moved by Dr. Strange, seconded by Dr. William Roberts, and unanimously carried.

Wednesday, July 29th—Second Day.

Dr. William Roberts delivered the

ADDRESS IN THERAPEUTICS.

(See page 115.) The address was received with marked attention; at its conclusion Dr. Chadwick moved and Mr. McNamara seconded a vote of thanks.

The Association then passed to a discussion as to the

PLACE OF THE NEXT ANNUAL MEETING.

Brighton was finally selected.

The work in the sections was then begun. In the Section on Medicine, the President, Dr. Samuel Wilks, of London, delivered an address. Diseases, he said, arose originally from peculiarities of climate, race, food, and the surroundings. Later the influence of heredity entered and is now potent. He had long taught that in all diseases of slow origin and progress the predisposing and exciting causes were identical. Dr. Wilks referred to the present ascendency of bacteria and bacilli in pathology, and believed that the fashion would in a measure pass away. Therapeutics, he said, was not really before pathology; the latter really leads. The nature of a disease must be known before therapeutics can achieve its greatest results.

Dr. Wilks called attention to the views about zymotic ferments as set forth by Liebig, and showed how these views had fallen through. Thus, on the so-called zymotic diseases, where ferments were to be expected, they had not been found, while microbes were found in phthisis, cholera, etc., where there is no analogy between the symptoms and those of specific diseases. The notion that each microbe has its specific pabulum he thought absurd, and the search for specific causes of disease by pathologists he thought very difficult, if not impracticable. Disease was often the result of irregularities in development of organs and lack of harmony in functions of kidneys, spleen, lungs, heart, etc. The best physicians survey the whole system and attempt to regulate properly these organs. As illustrating

IRREGULARITY OF FUNCTIONAL ACTIVITY,

the speaker described the curious intermittent or remittent action of many organs, occurring daily, or rhythmically night and day. No organ acted steadily and constantly.

He called attention, in conclusion, to the fact that pathological changes were of two kinds, reparative and destructive, and this fact should be borne in mind by the therapeutist.

At the conclusion, a vote of thanks was moved by Dr. Canning, and seconded by Dr. Roberts.

A discussion then followed on the

TREATMENT OF ACUTE RHEUMATISM.

It was opened by Dr. J. S. Bristowe, and participated in by Drs. Latham, Coupland, Prosser James, W. K. Thomas, Skerritt, Pavy, Harkin, and Wilks. The general tenor was in favor of the use of the salicylates. The blister treatment did not receive endorsement.

Papers were then read by Dr. L. Duncan Bulkley on "Asthma as Related to Skin Diseases," and by Mr. C. R. Straton on "Chorea, its Pre-ataxic Stage."

In the Section on Surgery an address was delivered by its President, Dr. E. H. Bennett, of Dublin.

The speaker took up the subject of the

BEST METHOD OF STUDYING FRACTURES

and injuries of the skeleton. The best method, he thought, was not by dissecting cadavers or experimenting on animals, but by collecting together many examples of the same kind in ordinary surgery. He had, in illustration, collected for study fifty-one cases of Pott's fracture. He had found that there were two forms of this injury, and that impaction was common. He had seen twenty-five cases of fracture of the costal cartilages, concerning which there were some peculiarities that needed further elucidation. A form of fracture of the upper part of the fibula oblique, without much displacement, was caused by a sudden jar, the foot being extended. Of fractures of the metacarpal bones, that of the thumb was most commonly affected. The fracture usually occurs close to the proximal end of the joint, and the whole bone slips back. The hand remains disabled for a long time.

A recent dissection and various specimens were shown.

A discussion upon Dr. Bennett's address followed, after which

Mr. Reginald Harrison opened a

DISCUSSION UPON TUMORS OF THE BLADDER.

(See p. 113.) To the discussion that followed Mr. Humphreys added letters received from Mr. Cadge and Mr. Annandale.

Papers followed by MR. W. ADAMS, on the

SO-CALLED CONGENITAL DISLOCATION OF THE HIP-JOINT;

by DR. J. WARD COUSINS on "The Treatment of Infantile Hernia and a new Washable Splint," by J. DAVIES THOMAS on the "Treatment of Pulmonary Hydatid Cysts by the Establishment of Large Openings into the Sac and Subsequent Free Drainage, based upon Thirty-two Cases."

IN THE SECTION ON OBSTETRIC MEDICINE

an address was delivered by the President, DR. HENRY GERVIS. He referred to the decline in the general death-rate of late years, and then to the decline in the deaths from childbirth. He expected that this decline would continue. He recommended the more frequent early and judicious use of the forceps, the more careful study of contracted pelves, great precautions for the prevention of hemorrhage, and the use of antiseptics. These latter were equally important before and during labor. The more healthy the surroundings and the more vigorous the patient the fewer the germs and the less the danger from them. The use of the antiseptic spray was seriously suggested, but its practical difficulties admitted. He advised regular antiseptic bathing and syringing after labor, a careful examination of the parts, and stitching up of lacerations. Advised sublimate solutions or boric acid. He referred to the results of the collective investigation in support of the use of vigorous antiseptic measures in childbirth.

He discussed the subject of Puerperal Fever, and said that morbid anatomy must still further correct clinical study.

In the Section on Public Health the discussions were chiefly devoted to cholera.

DR. R. PRINGLE read an article on "Cholera."

DR. H. J. PAINE read a paper on "Cholera and other Zymotic Diseases in their Relation to Sanitation, Practically Illustrated."

DR. J. MAUNSELL read a paper on "The Various Schemes for Medical Aid with a View to their Adaptations to the Requirements of the Present Day."

In the Section on Therapeutics a discussion on the "Duration of the Action of Medicines" was started by PROFESSOR LEECH, and a discussion on "Hypodermatic Medication" by DR. TALFOURD JONES.

(To be continued.)

THE VIENNA SOCIETY OF PHYSICIANS.

Stated Meeting, June 19, 1885.

PROFESSOR LEIDESDORF IN THE CHAIR.

(Special Report for THE MEDICAL RECORD.)

THIS, the last meeting before the summer vacation, was called to order by the President, who regretted that the attendance was not larger, but hoped that, after the long rest, the members would be present in large number at their next meeting in the fall.

PROFESSOR M. ROSENTHAL presented a patient suffering from

LEAD PARALYSIS.

The patient was an actor who had been in the habit of employing lead paints upon his face. The paralysis affected the extensor muscles of the right hand.

He also showed a case of

HEMIANÆSTHESIA

following diphtheria. The patient, a young girl, had complete loss of sensation of the skin covering the entire right side of the body, together with paresis of the muscles of the palate and of the vocal cord on the same side. There was, however, hyperæsthesia of the right brachial plexus. The muscular sense was unimpaired.

DR. GUIDO SCHWAB reported a case of

TRAUMATIC ANEURISM OF THE COMMON CAROTID ARTERY.

The patient was a woman, forty-one years of age, who had inflicted upon herself, with suicidal intent, a number of wounds in the neck with a pocket-knife. When seen two hours after the injury was inflicted she was found to have several wounds in the left side of the neck, from which a few drops of venous blood were exuding. The tissues in the neighborhood of the wounds were very greatly swollen. An iodoform dressing was applied and maintained in position for five days. Upon its removal at this time a distinct bruit was perceptible in the space between the heads of the sterno-cleido-mastoid muscle. Two months later a tumor, the size of a hazel-nut, easily compressible, was found in the left side of the neck along the course of the common carotid artery, at about the level of the conoid ligament. The swelling presented an expansive pulsation and a strong fremitus was perceptible. On auscultation of the tumor, as well as of the ascending and descending aorta, a loud murmur, synchronous with the cardiac systole, could be heard. This murmur as well as the pulsation ceased upon compression of the carotid below the seat of the aneurism.

DR. RIEHL then read a paper embodying the results of his investigations upon the

PIGMENTATION OF THE SKIN IN ADDISON'S DISEASE.

These confirmed the assertion of Nothnagel that the pigment in this disease is not elaborated in the epidermis, but is found in the deeper layers of the skin, sometimes massed around the vessels, and is deposited there by the blood. The writer had made microscopical examination of the vessels of the skin, and had found the adventitia in all cases remarkably nucleated. The cell-infiltration was found not only in the pigmented, but also in the colorless portions of the integument. In the arterial twigs of the cutis the media was also swollen and indistinctly pigmented. In some cases he found thrombi of the small arterioles. Since these arterial lesions were found in the entire integument, even in the non-pigmented portions, and also in some of the subcutaneous tissues and some of the internal organs (liver, peritoneum, and pleura), but thrombi only in the skin and suprarenal capsules, the author concluded that the arterial disease was primary and the cause of the deposit of pigment from the blood.

PROFESSOR MEYNERT read the last paper, entitled

THE RADIATION FIBRES OF THE ANTERIOR LOBES.

The author stated that choreic movements might proceed from the anterior cerebral ganglion, from the pons, or from that portion of the gray matter of the cord where the pyramidal tract ends, though in most cases they originated in the first-named portion of the central organ. He opposed Unvericht's theory that epilepsy depends upon an arterial neurosis and originates not in the cortical substance but in the subcortical motor centres.

The Society then adjourned.

SUBSTITUTE FOR MORPHINE.—A correspondent from Milton, Wisconsin, writes: "When morphine or opium makes a patient wakeful or crazy instead of quieting them, what substitutes or combinations of opium will agree with them? You will confer a favor on me by publishing an answer to this."

AMERICAN OTOLOGICAL SOCIETY.

Eighteenth Annual Session, held at the Pequot House, New London, Conn., July 14, 1885.

C. H. BURNETT, M.D., PRESIDENT, IN THE CHAIR.

DR. CHAS. J. KIPP, of Newark, N. J., exhibited the work of Gustav Retzius on the anatomy of the organ of hearing of vertebrate animals.

DR. SAMUEL SEXTON, of New York, read a paper on

INFLAMMATION OF THE ATTIC OF THE TYMPANUM.

The greater importance of inflammation arising in the attic as compared with that arising in the atrium was first referred to. Two forms of the affection were considered, acute and chronic inflammation of the attic, the latter presenting itself in the form of deep sinuses extending from the inner end of the canal up into the attic, into the antrum, and sometimes through the membrana flaccida.

The atticus tympanicus is that portion of the tympanum lying above a plane extending transversely from the prominence on the inner wall, formed by the external semicircular and facial canals, to the auditory plate on the outside. Beneath this plane lies the atrium tympanicum. The attic is divided below into two compartments, the inner being the larger, by the incus and malleus, the cord, ligaments, etc. These compartments communicate freely with each other, with the atrium, with the Eustachian tube, and with the antrum. These cavities are lined throughout with mucous membrane.

Acute inflammation of the attic may follow catarrh of the head, the exanthemata, and the entrance of fluids propelled along the Eustachian tube. The very frequent occurrence of inflammation of the attic from these causes is readily accounted for when we remember the Eustachian tube at its tympanic orifice opens by a free sweep into the attic as well as into the atrium. Irritating fluids seem always to be better borne in the lower than in the upper part of the tympanum. Inflammation of the attic may be simultaneous with, or independent of, inflammatiion of the atrium. It is the more serious from the fact that swelling of the mucous membrane prevents drainage. In such cases the membrana flaccida is red, the vascular turgescence extending above into the external auditory canal and sometimes downward about the short process of the malleus. Should the disease progress further, the inflammation may extend beneath the margo tympanicus of the auditory plate and be followed by effusion of serum and blood, which presses away the membrana flaccida and integument of the canal, producing a bulging sac so great sometimes as to entirely conceal from view the membrana tympani, and may entirely fill the canal and present at the lumen as a purplish tumor.

Periostitis of surrounding parts may occur and the inflammation may extend downward to the atrium, but as long as this does not happen and the membrana tympani is unaffected there may be little deafness. As a rule, inflammation in some degree extends into the antrum and mastoid cellules or those overlying the external auditory canal or in the tegmen. If the escape of secretions into the atrium or Eustachian tube is prevented, the case is more severe and extension to the cranial cavity more to be dreaded.

The subject of treatment resolves itself into a question of drainage and the employment of such constitutional remedies as tend to check the inflammation and prevent the formation of pus. Aconite and calx sulphurata were particularly referred to. Owing to the impossibility of making an accurate differential diagnosis between the pains of pachymeningitis and the neuralgic pains of otitis media, we should be very cautious about trephining the mastoid where pain is our only indication. It is manifestly useless to perform this operation after pachymeningitis has set in.

DR. D. B. ST. JOHN ROOSA, of New York, had nothing to venture in regard to the anatomy, but the remedies mentioned, mercury and calcium sulphide, are not in common use in the way recommended by the speaker. He had used mercury in doses of one-tenth to one-fifth grain and also sulphide calcium without any favorable effect. He asked Dr. Sexton to describe a case, indicating the manner in which he would use these remedies.

DR. SEXTON gives the remedies in small doses, frequently repeated. The moment there are symptoms of purulency calcium sulphide is given. He had seen congestion and swelling over the mastoid disappear under the use of the calcium.

DR. J. A. ANDREWS, of New York, referred to a case in which the inflammation was most intense in the upper part of the tympanic cavity. A perforation was established between the mastoid, antrum, and external auditory canal. There was a fluctuating point in the superior posterior part of the canal, which was opened. The patient made a good recovery.

DR. SEXTON recommended for the relief of pain the use of aconite or pulsatilla, the latter especially.

DR. C. R. AGNEW said that with children there is always a certain amount of indefiniteness in the symptoms, and he asked Dr. Sexton what he would do in a case of acute otitis media catarrhalis in an infant six months old.

DR. SEXTON replied that he would examine the history, ascertain the general condition, whether it was subject to catarrhal trouble, the condition of dentition, and whether there had been a previous attack of inflammation of the middle ear. If there were accumulation, he would not hesitate to let it out. If there were suppuration he would give calcium sulphide, but if there was only catarrh, give mercury.

DR. CHARLES J. KIPP, of Newark, N. J., was surprised to hear nothing said of inflation of the middle ear. This relieves the pain. Where there is protrusion in front of the membrane, incision gives relief to the suffering.

DR. THEOBALD, of Baltimore, had found the instillation of a warm solution of atropia of great service (four grains to the ounce), with this cathartics may be combined with great benefit. After perforation of the drum membrane he would recommend the use of boracic acid.

DR. C. J. BLAKE, of Boston, spoke of the reduplication of the mucous membrane in the upper portion of the tympanic cavity. This he had found in fifteen or twenty per cent. of two hundred specimens examined. They serve to separate the upper portion of the tympanic cavity from the lower, and are an important element in inflammation of this part, and may tend to retain secretions.

DR. SEXTON said, in conclusion, that he had used mercury and the sulphide of calcium for the last ten years in a large number of cases and was convinced that they are beneficial in a certain number of cases. If he was to give up anything, he would rather give up the local applications than give up these internal remedies.

A paper entitled,

THE TREATMENT OF CHRONIC OTITIS MEDIA

was read by DR. W. W. SEELY, of Cincinnati, in which the speaker alluded to the abandonment of the nasal douche and the posterior nares syringe, and held that all applications to the naso-pharynx should be made with care, as all were liable to do harm. All of the points thus far were to justify the author's condemnation of the slurring of these cases by specialists in various ways, such as putting the catheter or balloon into the hands of the patient or parents, throwing over the treatment of the throat also to the patient. He claimed that this class of cases were almost all amenable to treatment, and only time and patience were necessary to manage them.

The speaker thought that the attention of the general profession was becoming too much centred on the Eustachian catheter as the only means of treatment, and especially as the only means of opening the tubes. Often

catheterization does harm rather than good, and some application of boric acid and vaseline, or, what is still better, of the yellow oxide of mercury and vaseline through the nostrils, will open the tubes, while the catheter has little or no effect. He said that salves had almost if not quite supplanted all other applications for nasal and naso-pharyngeal troubles.

The speaker concluded his remarks with the following propositions:

1. That only experience of sufficient length of time (often lasting over months) in each case can determine whether treatment shall be continued (daily), or interrupted, *i.e.*, perhaps daily for a week, followed by an interruption of some weeks or months.

2. Only experience in each case can inform us whether treatment is to be entirely directed to the middle ear, or entirely to the naso-pharynx or combined against both.

3. Only experience in each case can inform us whether injections into the cavitas tympani are called for. Under this head it was stated that direct medication, either of the middle ear or naso-pharynx as routine treatment was unwise, till simple inflation had failed.

4. Mechanical dilatation of the tubes is rarely necessary or advisable. Only in extremely dry states of the tube is dilatation followed by much success.

5. Hearing-tests are not reliable, and hence patients with great deafness, great loss of bone conduction, etc., should not be sent away till the test by trial has been gone through with.

6. Simple inflation failing, the greatest attention should be given to the naso-pharynx, even though it is in an apparently fair condition.

7. Syringing, douching, and swabbing the naso-pharynx should be abandoned.

Dr. Charles H. Burnett, of Philadelphia, read a paper on

THE RELATIONS BETWEEN CHRONIC CATARRHAL OTITIS MEDIA AND CHRONIC RHINITIS.

The author finds: 1. A constant causal relation between chronic catarrh of the middle ear and chronic rhinitis and rhino-pharyngitis. The latter is chiefly of the hypertrophic form. The atrophic form, which is made to include the fibrous degenerations and the sclerotic forms, as well as the truly atrophic, with shedding of epithelium and exposure of basement membrane, constitutes about fourteen and one-half per cent.

2. The appearances of the membrana tympani in the first or numerous class are very diversified, so much so as to preclude a predication of the state of the middle ear and hearing from them alone. In the second class, however, the atrophic, the symptoms presented by the membrana tympani are more uniform and consistent, and the surgeon is able to predicate from them more precisely concerning the aural disease. Yet, on the whole, the appearances of the drum, taken by themselves, cannot aid greatly in the diagnosis of chronic aural catarrh. The faucial symptoms play a very subordinate part in diagnosis in chronic catarrh of the middle ear, because faucial and throat disease have little or no causal relationship to aural disease.

3. Tinnitus aurium is more marked in the atrophic class than in the hypertrophic, as a rule. There is also a greater patency of the Eustachian tube in the atrophic forms of aural disease than in the hypertrophic, though it is found in both forms of naso-aural disease. It is most relieved by treatment of the nares and naso-pharynx.

4. The treatment in the first class should be by cleansing and astringent sprays, with applications of preparations of iodine never stronger than half-and-half. Nitrate of silver is not to be used at all in hypertrophic rhinitis. In the atrophic form, the treatment must be cleansing, the removal of inspissations, if they occur, and then the application of stimulant sprays, preferably nitrate of silver, not stronger than four grains to the ounce of water.

Where the hypertrophies have become dense and large, requiring surgical removal, Dr. Burnett thinks the case should pass into the hands of the rhinologist.

A word of caution is given in regard to the use of the galvano-cautery in the nares, since it, like the nasal douche, may lead to inflammation in the naso-pharynx and middle ear. The aural surgeon should always examine the nares, being prepared to treat the non-surgical forms of chronic rhinitis in order to properly cope with chronic aural catarrh.

Dr. Agnew, of New York, thought it was impossible to apply salves to the whole of the diseased surface by means of Bowman's probe. He was not prepared to abandon the nasal syringe. He thought more stress should have been laid on the importance of hygiene, which is the most important element in the treatment.

Dr. Roosa agreed with the last speaker that the principal and only benefit to be obtained in the majority of these cases is from proper hygiene. He thought that we need not continue our examinations very long or repeat them very often to determine whether or not we may expect to give the patient any relief. If he finds diminished bone conduction he considers it unnecessary to go on and treat that patient.

Dr. E. Williams, of Cincinnati, had been in the habit of using the Eustachian catheter in every instance where he thought it indicated. Not only so but he often introduced a flexible bougie through the catheter sometimes into the middle ear. In some cases of stricture of the tube this is quite useful.

Dr. Seely said that since he had adopted the use of salves as a routine treatment he had had more satisfaction than by any other treatment. They remain longer in contact with the affected part than do solutions, thus giving a more decided effect.

Afternoon Session.

Dr. Sexton presented a conversation-tube for the aural instruction of deaf-mutes. By means of this tube the patient was able to hear his own voice and compare it with the voice of his teacher.

Dr. Graham Bell was then introduced and called the attention of the Society to the greater number of children who were classed in institutions as deaf-mutes, but who, under proper treatment and education, could be made simply hard-hearing members of society. He also referred to the importance of otologists formulating a list of causes of deafness to facilitate the proper registration in institutions for this class of individuals.

Dr. Charles J. Kipp, of Newark, N. J., presented the history of

A CASE OF FATAL EAR DISEASE, BEGINNING AS A CIRCUMSCRIBED INFLAMMATION OF THE EXTERNAL AUDITORY CANAL.

The patient, a married woman, aged twenty-eight, was first seen nine months before her death. Since the previous confinement, which occurred four months before coming under observation, she had suffered occasionally with severe pain in and about the left ear. There was swelling and redness of the posterior upper wall of the external canal. There was no perforation and no otorrhœa. Under the use of leeches, instillations of morphia, and inflation of the middle ear, there was decided improvement in the course of a month, when she passed from under observation.

Eight or nine months later the pain again appeared, shortly after a confinement. Examination showed furuncles in the ear. There was no involvement of the middle ear. The patient soon recovered from this, but was subsequently attacked with severe pain in the head. There was no evidence of mastoid disease. The patient shortly afterward died.

At the autopsy there was found evidence of intense inflammation over the entire extent of the arachnoid and pia mater. There was a collection of pus immediately over

the posterior surface of the petrous portion of the temporal bone. Pus was also found on the pons varolii. A small abscess was found in the anterior part of the left lobe of the cerebellum near its junction with the pons. The mastoid cells were filled with pus. There was only a thin exudation in the middle ear.

DR. BURNETT reported a similar case in which the patient died from what was diagnosed as cerebral abscess, but no autopsy could be obtained.

DR. E. E. HOLT, of Portland, Me., reported

THE PRESENT CONDITION OF A PATIENT FROM WHOM TERATOID TUMORS WERE REMOVED TWO YEARS AGO.

The patient had remained free of the disease for one year, when they again appeared and have since progressed quite rapidly.

THE LOCAL USE OF COCAINE AND BRUCINE IN DISEASES OF THE EAR

was the title of a paper read by DR. C. H. BURNETT, of Philadelphia. The speaker had employed both the sulphate and hydrochlorate of cocaine in painful affections of the ear to produce anæsthesia. He found neither efficient when the pain was due to inflammation in dense tissues of the external auditory canal, as in furuncle of this part, nor when acute inflammation occurs in chronically thickened periosteal and mucous tissues in the tympanic cavity. The hydrochlorate of cocaine, however, is efficient to induce local anæsthesia in four per cent. solution, in cases of not excessive congestion of the skin of the fundus of the auditory canal and in the membrana flaccida of the drum membrane, as is observed in acute coryza attended with pain of a not continuous or intense variety. The solution may be applied to the inflamed tissues either by mopping it gently upon the affected portion, or by soaking a small dossil of lint and laying it upon the seat of inflammation, both procedures being done under perfect illumination of the fundus of the auditory canal by means of the forehead-mirror. But solutions of cocaine are not competent to produce local anæsthesia in the external auditory canal profound enough to permit painless incision into it. Local anæsthesia in the membrana tympani, prefatory to paracentesis, is not required, as the operation is not painful enough to demand local anæsthesia.

The Doctor had also used brucine in five per cent. solution with decided success in several cases of ear trouble, and had produced decided anæsthesia with it.

DR. E. E. HOLT, of Portland, Me., read a paper entitled

DOES COCAINE HYDROCHLORATE, WHILE RELIEVING THE PAIN IN ACUTE OTITIS MEDIA, PROLONG THE CONGESTION?

The Doctor concluded that while cocaine relieved the pain and for the time holds the inflammation in check, yet after the effect of the remedy passes off, the inflammation goes on unaffected.

DR. H. KNAPP, of New York, read a paper

ON THE DESIRABILITY OF ADOPTING A UNIFORM METHOD OF EXPRESSING THE RESULTS OF TESTING THE ACUTENESS OF HEARING.

The following nomenclature was suggested in which the plan pursued in recording the condition of vision is applied to the hearing:

$H=\frac{24}{24''}$, normal audition for watch.

$V=\frac{20}{20'}$, normal hearing for whispered voice.

$V=\frac{20}{60}$, normal for conversational speech.

$V=\frac{20'}{\infty}$, whisper or speech heard, but not understood, *i.e.*, qualitative perception of sound.

$V=6o'=O$, voice not heard at all; $H=O$, complete deafness for all sounds.

$H=\frac{c}{24''}$, watch of 24″ hearing distance is heard in contact.

$H=\frac{Pr}{24''}$, watch of 24″ hearing distance is heard when pressed on ear.

$H=\frac{M}{24''}$, watch of 24″ hearing distance is heard when applied to mastoid.

$H=\frac{T}{24''}$, watch of 24″ hearing distance is heard when applied to temple.

$H=\frac{O}{24''}$, watch of 24″ hearing distance is heard when applied to teeth.

$H=\frac{Gl}{24''}$, watch of 24″ hearing distance is heard when applied to forehead (glabella).

$H=\frac{V}{24''}$, watch of 24″ hearing distance is heard when applied to vertex.

$H=\frac{Ub}{24''}$, watch of 24″ hearing distance is heard when applied everywhere (ubique).

To indicate that the watch is not heard at the places indicated, the following are used: $H=\frac{c}{24''}=O$, $H=\frac{M}{24''}=O$, etc., means that the watch is not heard in contact over mastoid, etc.; $H=\frac{Ub}{24''}=O$, means that bone conduction for the watch is lost.

Dr. Knapp was appointed a committee of one to present the matter at the coming meeting of the German Naturalists and Physicians.

PRESBYKOUSIS.

DR. D. B. ST. JOHN ROOSA, of New York, applied this term to the failure of hearing which is incident to old age and which is not dependent upon inflammatory affections. It comes on after the age of forty or fifty years. Such persons hear badly in a noisy room. They hear the watch badly, but in a quiet room they can hear quite well. This is characteristic of this affection. In inflammatory troubles with the ear, the person often can hear pretty well in a noise, while in a quiet room he hears badly. These three symptoms go together: diminished bone-conduction, hearing worse in a noise, and the disproportion between the ability to hear the voice and the watch. The conditions on which this presbykousis is dependent has not been determined, for as yet there have been no opportunities for post-mortem examinations.

DR. H. KNAPP thought the term presbykousis was not a good one, because if used in analogy with presbyopia it would indicate a diminished range of accommodation of hearing, which would refer more to pitch than anything else. What is meant is senile involution, which occurs in every organ.

DR. ROOSA, in conclusion, said that he thought the term presbykousis applicable, as its meaning was simply the hearing of old age. In regard to the hearing better in a noise, he was convinced that patients with tympanic disease could hear better under such circumstances. He cited the example of a lady who heard with difficulty under ordinary circumstances, but who in a boiler-shop heard the ordinary voice distinctly while her husband with normal hearing, heard only when words were shouted.

DR. SEXTON exhibited a glass ear-syringe and an ear-forceps with several attachments.

DR. E. DYER, of Newport, R. I., reported a case of fistula of the helix in a girl of fourteen.

The following papers were read by title: "A Case of Chronic Otitis Media Suppurativa, resulting in Cerebellar Abscess, with the Autopsy," by Dr. O. D. Pomeroy, of New York; "Otitis Media Suppurativa, Mastoid Disease, Pyæmia, Mastoid Operation, Recovery," by Dr. G. Bacon, of New York.

The meeting then went into executive session.

The following officers were elected:

President—Dr. J. S. Prout.

Vice-President—Dr. S. S. Sexton.

Secretary and Treasurer—Dr. J. J. B. Vermyne, New Bedford, Mass.

Publication Committee—Drs. Vermyne, Blake, and J. O. Green.

Committee on Membership—Drs. Carmalt, Kipp, and Theobald.

Dr. F. L. Capron, of Providence, R. I., was elected to membership.

The meeting then adjourned.

Correspondence.

OUR LONDON LETTER.

(From our Special Correspondent.)

MR. WOOD'S LECTURES ON THE RADICAL CURE OF HERNIA —MR. LUND ON RECTAL AFFECTIONS—THE ELECTION AT THE COLLEGE OF SURGEONS—DISFRANCHISEMENT FOR MEDICAL RELIEF.

LONDON, July 4, 1885.

AN interesting historical *résumé* of the subject was given by Mr. Wood in the concluding lecture of his course at the College of Surgeons on "Hernia and its Radical Cure." It was, I am sure, news to many of his hearers that Celsus practised excision of the sac and its covering; and that Galen and Paulus Ægineta ligatured the sac at the superficial ring, and tied up also the cord and skin. These and many other interesting historical particulars were recounted by the lecturer. Coming to more modern times, Mr. Wood made the just protest that his name had been applied to operations in which all his precautions were neglected, and also to the employment of a part of his operation only as the basis for a new method. The result, in many cases, he said, had been a want of success, for which, not the operation, but the operator, was really responsible.

Mr. Wood maintained that the position of those who maintained that the radical cure should not be attempted except in the severest cases was untenable. In conclusion, he enumerated the rules he had adopted in his own cases. He said he had adopted the subcutaneous plan:

1. In cases of children above five years of age in whom trusses were useless or unavailable.

2. In cases of young adults, or boys under fourteen, whose prospects in life were seriously impaired by the hernial condition.

3. In reducible cases, where the sac was thick and indurated from truss-pressure, or where the omentum continually slipped down under the truss, thus showing that it was abnormally elongated. He opened the sac, tied the vessels of the omentum separately, and removed it below the ligatures. The neck of the sac was tied up flush with the peritoneum at the deep hernial opening, and wire or tendon-ligatures applied to the canal and rings.

4. In all favorable cases of strangulated hernia (both inguinal and crural), the coverings and front wall of the canal being necessarily divided to search for the constricting tissues, he opened the sac, examined the contents, removed adhesions and doubtful portions of omentum, then tied up the neck of the sac, cut it off short, and removed it altogether (except in congenital hernia), and secured the walls of the canal and rings, as in the subcutaneous method.

5. Cases of irreducible hernia, and of large and unmanageable cases of reducible hernia, in patients otherwise in good health and not above sixty, and in which truss-pressure entirely failed to render the patient comfortable and free from danger, seemed (said the lecturer) to justify and require operation (under strict antiseptic methods). In these cases, as in the last class, the operation assumed more or less of the character of an open operation under spray. The sac was freely opened, tied and removed, but the suturing of the canal and rings was effected as in the subcutaneous method.

In Mr. Lund's third lecture he spoke of the value, in cases of proneness to diarrhœa and irritability of the lower bowel, of making a careful digital rectal examination. He referred to a case of this kind in a lady which was by this means shown to be due to the irritation of a fibroid tumor in the pelvis. In another case, a surgeon about to operate on a fistula discovered an epitheliomatous deposit, with contraction of the bowel and a corresponding dilatation above, with rupture and abscess as a starting-point for the fistula. The operation was thus rendered useless. In discussing the operative treatment of fistula, Mr. Lund indorsed Mr. Curling's axiom, that the surgeon who operates for fistula should be his own dresser. While the incisions are being made, he avoids the use of water or wet applications to the part. Any blood or pus is removed by pieces of dry lint or linen cloth. After the operation, Mr. Lund said he used carbolated castor-oil to protect the freshly-cut surfaces from the irritation of fæces, mucus, or flatus. The oil should be so prepared as to be clear and bright, and, if applied freely, no washing of the part is necessary.

The annual election of members of Council at the College of Surgeons was held on Thursday. In spite of his known opposition to reform, Mr. Savory was returned at the head of the poll. The other successful candidates were Mr. Pemberton, of Birmingham, and Mr. Macnamara, of the Westminster Hospital. Both these latter gentlemen have declared themselves in favor of reform, and both have been strongly supported in their candidature by the Council of the Association of Fellows of the College of Surgeons.

The question of disfranchisement for medical relief, though not exactly a medical question, or at any rate only partially so, is exciting a good deal of interest just now. As originally drafted, the recent Franchise Bill did not disfranchise persons who received medical relief. By an amendment inserted in the House of Lords, however, such persons *resident in England* were disfranchised, though the amendment was not made to apply to Ireland. A good deal of agitation is now going on against this clause in England. Some people appear to think that being attended by the parish doctor does not make a man a pauper, though the acceptance of food or lodging from the parish does. Medical men who have large opportunities of judging of the character of the proposed new voters seem to regard them with but little confidence, and are inclined to argue that these people will never be provident so long as they are encouraged to look to the State to provide them with medical attendance.

OUR PARIS LETTER.

(From our Special Correspondent.)

DISCUSSION ON ERYSIPELAS — TEST FOR DIGITALINE — ASEPTOL—NEW HOSPITAL AT HAVRE.

PARIS, July 3, 1885.

IN expressing his opinion on the debate that has occupied so many meetings of the Academy of Medicine, Dr. Dujardin-Beaumetz stated that he could not understand why so much time and controversy were devoted to the subjects of erysipelas, particularly as nothing new has been added to our knowledge of the pathology, etiology, and the treatment of this affection. Erysipelas, he added, was a very common affection in the medical wards, and is in general rather benign; death from it was altogether the exception. Professor Hardy entirely agreed with this opinion. During the last ten years that he has been clinical professor at one of the largest hospitals in Paris, he has seen a very great number of erysipelatous patients, and among them there were only three deaths, and yet it cannot be said that the three patients died from erysipelas, as they were at the same time the subjects of other affections which, of themselves, were of a fatal character. Dr. Féréol remarked that there was a wide difference between medical and surgical erysipelas, and that the gravity of the former was not to be compared to that of the latter. It is, however, generally admitted that erysipelas is a highly contagious disease, and many of the speakers expressed their surprise at the promiscuity of erysipelatous patients with those suffering from other ailments. This led to the proposition emanating from Professor Verneuil that special wards should be constructed with the view of isolating erysipelatous

patients from the others. There is no doubt that there is much to be done in this direction, and it is a crying disgrace to a country that is supposed to be in the van of civilization to have no special arrangement at this period of medical history for the accommodation of persons suffering from infectious or contagious maladies, and yet millions of money are spent on objects much less useful.

Very great difficulty often attends the testing for digitaline, the coloring re-agents indicated by authors being so little distinct and varying according to the source of the samples on which experiments are performed. M. Lafon, in making some researches, found a new reagent which is very sensitive, and permits one to differentiate more distinctly than has up till now been possible the numerous products employed in therapeutics under the name of digitaline. This process consists in treating a trace of this substance by a mixture of sulphuric acid and alcohol, and adding to the mixture one drop of the perchloride of iron. A beautiful greenish-blue tint is immediately produced which is altogether characteristic and lasts for several hours. These results were submitted at a recent meeting of the Academy of Sciences.

At the same meeting M. Serran drew the attention of the members present to the antiseptic, antiputrid, and antifermentescible properties of orthoxy-phenylsulphurous acid or aseptol—a syrupy liquid, of a pink or reddish color, of a slight special odor, not so disagreeable as carbolic acid, over which it presents, according to the author, a real superiority, on account of its great solubility in water—to its being much less toxic, and to its antiseptic qualities being three times greater than those of carbolic acid. Aseptol can be administered internally in very large doses without the least inconvenience, whereas carbolic acid, in doses three times smaller, produces the gravest accidents.

A new hospital was opened at Havre last week in the presence of the official authorities of that town and of the Department of Calvados. The Prefect of the Seine, and the Presidents of the Academy of Medicine, and of the Société de Médecine Publique, were also present. This is an institution that was much needed in that important seaport. The hospital, which covers an area of 65,000 square metres, or 71,108 square yards, consists of seventeen detached pavilions, which are well ventilated and have a sunny aspect. They are built over a subbasement, raised to a good height, in which are established promenades for wet weather, reading and recreation rooms, calorifers, etc. The wards, which are on the ground-floor, are lofty, measuring seven metres, or about twenty-three feet, in height. The roofs are ogival, and the walls are varnished so that they may be easily washed. The floor is mosaic, which I think is a mistake, as however closely the pieces may be joined together the dust will accumulate between them. The pavilions, eleven only of which are devoted to patients, have double walls, and the air that fills the space between them being a non-conductor protects the wards against sudden changes of temperature. The hospital is lighted by electricity, and is furnished with all the modern appliances for disinfecting furniture, linen, etc., which are established underground, and to which persons from the exterior can also have recourse. There is also every variety of baths, which are equally open to the public. A pavilion is set apart for contagious and infectious diseases, another for cases undefined, and one for convalescent patients.

The hospital was built at great expense, and can furnish 312 beds, each bed costing $1,200, and each patient has a cubic space of 50 metres, or 164 feet, 0.539 inch, which seems to me far below that allowed by the ordinary rules of hygiene.

A fortnight ago Dr. Gibier was sent to Spain by the Minister of Commerce to study the progress of the cholera epidemic in that country, and the results of Dr. Ferrán's inoculations as a preventive of the disease. The French Government has also sent a mission to Spain with the same object. This mission is composed of Drs. Brouardel and Charrin, and M. Albaran, who is an interne and a native of Cuba.

PRELIMINARY REPORT OF THE COMMITTEE ON DISINFECTANTS OF THE AMERICAN PUBLIC HEALTH ASSOCIATION—REPLY TO DR. DUGGAN'S CRITICISMS.

To the Editor of The Medical Record.

Sir: My absence in Europe has prevented an earlier reply to Dr. Duggan's criticisms. It was hardly to be expected that a *preliminary* report, made, by special request, before the experimental investigations undertaken by the Committee were completed, would be beyond criticism. But the writer has been surprised that a criticism of this character should have been made by one who has been daily working in the same laboratory with him, who for a time was his trusted assistant, who has received compensation and full credit for all work done by him, and who has had ample opportunity to personally call attention to the points which he has seen fit to criticise publicly. This seems the more remarkable in view of the fact that I asked Dr. Duggan if he had any criticisms to make soon after the publication of this report, when there was still time to revise it, if necessary, before it had been placed in the hands of the public.

Moreover, the only part of his criticism which is valid was uncalled for, inasmuch as the "Disinfecting and Antiseptic Powder" had been withdrawn in a communication to the *Medical News* of May 2d, more than a month prior to the publication of Dr. Duggan's paper in The Medical Record, June 6th.

The writer alone was responsible for this powder, and freely confesses that he made a chemical blunder in his attempt to combine in the same formula the two potent germicides, mercuric chloride and chloride of lime. The mistake arose from the fact that in the powder, made as directed, the yellow oxide of mercury is not formed, and the two active ingredients remain indefinitely, in sealed packages, without undergoing change. *It is only when water is added that the reaction* occurs. But this is fatal to the usefulness of the powder.

Having made this free confession with reference to my unfortunate chemical blunder, I shall briefly consider the other criticisms made by Dr. Duggan; but first it seems necessary to state certain facts, which will perhaps explain why he has seen fit to rush into print with his criticisms when he had daily opportunity to call my attention personally to the points he has attempted to make.

In carrying out a series of experiments upon commercial disinfectants under my direction, by my method, and at the expense of the Committee on Disinfectants, Dr. Duggan had his attention drawn to the superior value of Labarraque's solution, as compared with the various proprietary disinfectants tested. This led to his giving special attention, at my request, and at the expense of the Committee, to the hypochlorites. At the time these experiments were made, Dr. Duggan was (and I believe still is) in the employ of an enterprising firm of manufacturing chemists. I found that through him this firm was getting *points* with reference to our work which were of value in a commercial way, and which gave them an advantage over other manufacturers, whose products were being examined and reported upon. I found also that Dr. Duggan's work for his employers took so much of his time that he could not push the work of the Committee on Disinfectants as rapidly as I desired. I therefore placed the further examination of commercial disinfectants in the hands of my efficient laboratory assistant, Dr. A. C. Abbott. From this time Dr. Duggan ceased to give me the benefit of his chemical knowledge, and,

as the limited funds at the disposal of the Committee on Disinfectants did not enable me to secure the services of another chemist, I was thrown upon my own resources; for the chemists upon the Committee are not located within consulting distance of the laboratory in which I work.

What follows will show very clearly, however, that if a biologist may go astray on chemical questions, chemical experts are not infallible; and that something more than laboratory training is necessary in judging of practical questions relating to the use of disinfectants. This is shown by Dr. Duggan's criticism relating to the directions given for disinfecting clothing with Standard Solution No. 4. He says: "We would suggest burning the clothing as preferable to this treatment, for when they are taken out of this solution they will be of a dark yellow color," etc. Now as a matter of fact *no discoloration occurs* when soiled clothing is treated in the manner directed. A small piece of perfectly clean goods immersed in a considerable quantity of the solution, diluted as directed, is slightly stained, especially if distilled water is used in making the dilute solution. But the organic matter present in soiled clothing, and even in new goods, very quickly neutralizes the small amount of potassium permanganate present—less than half a grain to the gallon—and no discoloration occurs. A worn sock and two small pocket-handkerchiefs, slightly soiled, immersed in a quart of the disinfecting solution caused the color due to the presence of the permanganate to disappear in less than two minutes; a clean pocket-handkerchief immersed in the same quantity of the solution for two hours was very slightly stained. This possibility of staining was fully considered by the Committee before the recommendation was made, and since Dr. Duggan's statement that "burning the clothing would be preferable to this treatment," three members of our Committee have repeated the experiments, and find that this is something more than a gross exaggeration. From a practical point of view the objection is entirely without foundation. If the permanganate were really objectionable on this ground it would be a very simple matter to reduce the quantity prescribed "to give color to the solution," for ten or twelve grains per gallon would suffice for this purpose. The intention is to give color to the concentrated solution and not to the dilute solution, which is made by adding one ounce of this to the gallon of water.

So far as injurious action upon clothing is concerned Standard Solution No. 4 has a decided advantage over solutions of the hypochlorites on account of the bleaching action of those salts

Again, with reference to the application of Standard Solution No. 4 to plastered walls, Dr. Duggan says: "*Of course*, Standard Solution No. 4 would color walls the same as it would clothing." It is not well for a critic to say "of course" about a thing of this kind when it is so easy to make the experiment. Two members of the Committee on Disinfectants have made the experiment, and are able to testify that *no discoloration occurs*.

The suggestion that the inmates of a room disinfected as directed might subsequently suffer from mercurial poisoning has no value, inasmuch as after the application of the disinfecting solution the walls and ceiling are to be "whitewashed with a lime-wash" (no yellow discoloration results from this), and "the floors and woodwork to be well scrubbed with soap and hot water."

The criticism which affirms that the addition of one pound of corrosive sublimate for every five hundred pounds of the contents of a privy-vault would accomplish little more than would be accomplished "by dropping a sulphur match into the vault," is hardly entitled to serious consideration. This criticism, moreover, is based upon the assumption that the mercuric chloride is to be added in solid form, whereas our directions explicitly state that it is to be used in solution. Dr. Duggan speaks of the difficulty with which mercuric chloride dissolves, and says that "in such a mass of fecal matter every particle of it would probably become encysted in an envelope of the insoluble albuminate, and remain so indefinitely." The Committee did not for a moment contemplate the use of the undissolved salt, and prescribed a standard solution on account of the difficulty with which mercuric chloride dissolves. After giving the proportion in which, in its judgment, this agent should be used, it explicitly directs the use of Standard Solution No. 4, diluted with three parts of water; and says further, "All exposed portions of the vault, and the wood-work above it, should be thoroughly washed down with the disinfecting solution."

For the disinfection of excreta, in small quantities, in the sick-room, the Committee has given precedence to the solution of chloride of lime (Standard Solution No. 1) on accounts of its rapid action. But for masses of material in privy-vaults the solution of mercuric chloride is preferred for the following reason:

The chloride of lime solution in contact with organic material is promptly decomposed, and if the organic material is in excess and a certain number of germs escape destruction, they may subsequently develop in the presence of fresh supplies of pabulum. But the mercuric chloride remains in the vault indefinitely in a potent form—for the albuminate of mercury is a potent germicide—its wonderful restraining influence upon the development of germs comes into play even when it is present in too small a quantity to destroy the vitality of germs with which it comes in contact. I would here call attention to the fact that I have demonstrated by actual experiment that mercuric chloride does sterilize semi-solid fæces, when a solution of one-half the strength of that recommended in our preliminary report is well mixed with the material (*Medical News*, February 21, 1885, p. 208).

Finally, I would say that the Committee on Disinfectants invites unprejudiced criticism, and will be glad to avail itself of all information attainable, in order to accomplish the whole object which it has in view, viz., to give the public the best possible information with reference to practical disinfection. But this object can be as well attained if the critics will communicate directly with the Committee, and this course will save valuable time and printer's ink.

I would say, in conclusion, that I do not understand what additional force Dr. Duggan's criticisms receive from the signature of C. T. McClintock, A.M., attached to his paper.

GEO. M. STERNBERG, M.D.,
Major and Surgeon U.S.A., Fellow by courtesy in Johns Hopkins University, *Chairman of the Committee.*

LETTER FROM THE CITY OF MEXICO.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR: As your paper has more than once published correspondence from various places in this country, I hope the following will not be altogether without interest to your readers.

The most striking features of medical life and hygiene in this country and during the last few years have been the following:

1. A constantly and disproportionately increasing mortality in the capital of the Republic; having been a couple of years ago 240 to 250 per week, and having run up lately to 300 a week, the population being over 250,000, and probably not reaching 300,000. Certain it is that the population has increased during late years, but not in such a proportion as the death-rate; for ten years ago the population of the capital was already estimated to be 250,000. The above figures give the city of Mexico a yearly death-rate of 50 per 1,000, or 1 in 20; while the city of Guanajuato is still worse off than the capital, showing a death-rate of 74.4 per 1,000, or 1 in 13.4 a year, the population being 58,000 souls. The lead among the prevailing diseases

belongs to diarrhœa and other intestinal troubles (often of alcoholic origin), pulmonary complaints (pneumonia, bronchitis, tuberculosis), and typhus. A great deal has been talked and written about the causes of the daily growing worse hygienic state of this place, but nothing has been done. It is evident that the filth of three hundred and fifty or more years, and the absolute lack of drainage and sewers, must be the most important factors of such a pitiable condition.

2. Another important accident has been the appearance of severe epidemics of yellow fever on the Pacific coast of Mexico, a calamity that for more than two hundred years, it is said, did not take place. It is not ascertained how yellow fever this time happened to be carried across the continent; it may be that the work on the interoceanic railway over the isthmus of Tehuantepec, with a considerable accumulation of unacclimated people, had something to do with it. The places most cruelly visited, twice in two consecutive years, have been Colima, San Blas (where last year six hundred people died out of a total population of two thousand), and Guaymas in Sonora.

3. The investigations of Dr. Carmona y Valle into the origin of yellow fever and its protective inoculation. As your paper has already briefly mentioned the trials of Dr. Domingo Freyre and Dr. Carmona, it may be time to say a few words about the latter's ideas and practice. Dr. Freyre takes particles of the entrails of yellow-fever corpses—for instance, of liver, heart, or brains—puts them in appropriate liquids for cultivation, and of the fourth culture he takes a particle again, and inoculates it. Dr. Carmone claims that the yellow-fever germ is not reproduced in that way, and consequently Dr. Freyre only inoculates broth, etc.

Dr. Carmona has found in all the liquid and solid tissues of yellow-fever patients one and the same microscopical fungus, identical with the "peronospora lutea." He considers that to be the characteristic of yellow fever. The easiest way to get that "peronospora lutea," or rather its "zoosporon," is to take a quantity of urine and to evaporate it. The dry sediment contains the vaccin matter against yellow fever. A minimum of this sediment is diluted in distilled water and injected hypodermically.

Physicians versed in the use of the microscope pretend that the "peronospora lutea" is found in every urine of every body, if it stand a certain time exposed to the air, or if the recipient vessels have not previously been perfectly well cleaned. Your correspondent has no pretension to be a judge in the matter; however, if the "zoosporon" of "peronospora lutea" is not the cause of yellow fever, its introduction in the living might still prove to be a preservative against the terrible scourge.

Several thousand people have been inoculated by Dr. Carmona's method, and experience will soon show whether he has made a mistake or a great discovery.

F. S.

City of Mexico, June 29, 1885.

NEURONYMY.

To the Editor of The Medical Record.

Sir: In the report of the recent meeting of the American Neurological Association in The Record for June 27th, page 713, and in the editorial, "Brain Nomenclature," page 708, the words *neuronomy*, *paronomy*, and *heteronomy* should be *neuronymy*, *paronymy*, and *heteronymy*. There may be room for a difference of opinion or taste as to which of the two forms, ὄνομα, onom, and ὄνυμα, onym, should be used in combination, but the latter occurs in *synonym*, *eponym*, and *paronym*, which are given in English dictionaries, and in *mononym*, *dionym*, etc., recently suggested by Dr. Coues, as well as in my own *organonymy* and *toponymy*. The three words in question are correctly printed on the program of the meeting.

Time failed for the public discussion of my address, but in private conversation with two well-known and progressive members of the Association, one of them expressed a preference for the unchanged Latin names (e.g., *commissura media*), while the other would rather render them into ordinary English (e.g., *middle commissure*) by translation or heteronymy. My mononym for the Latin dionym is *medicommissura* and its English paronym, *medicommissure*, permitting the formation of the adjective *medicommissural*. It will be seen, therefore, that my position is strictly intermediate between the classicalism which may appear pedantic (e.g., *iter a tertio ad quartum ventriculum*), and the vernacularism (heteronymy) which may be undignified (e.g., *worm*, *body of Luys*, and *"passage from the third to the fourth ventricle"*). I am neither surprised nor disturbed at the reluctance of teachers and writers to change their accustomed modes of expression, but my belief that the English neuronymy of the not far distant future will consist chiefly of mononymic paronyms (English forms of Latin names of a single word each) is certainly not shaken by the incident just mentioned. On the contrary, as a not unhappy mean between two extremes, I am reminded of Lord John Russel, who "knew he was right because all parties found fault with him." Burt G. Wilder, M.D.

Siasconset, Nantucket, Mass., July 3, 1885.

New Instruments.

A NEW TISSUE OR TRACHELORRHAPHY FORCEPS.

By GEO. COWAN, M.D.,

Danville, Ky.

The difficulty of clearing out the angles nicely between the flaps in lacerations of the cervix, so as to bring the planes of incision to their true line of intersection, is a well-recognized one; and no apology to the profession is necessary for inflicting upon its consideration a new instrument in the shape of a tissue forceps.

Everyone who has had to operate upon irregularly-shaped, unsymmetrical lacerations, filled with tough cicatricial tissue, has experienced the difficulty of locating and controlling, with a proper degree of precision and ease, the lines of incision with the instruments used for cutting, whether they were the curved scissors or scalpel. I have, therefore, had the Messrs. George Tiemann & Co. construct for my use the tissue-seizing forceps illustrated by the accompanying drawing.

The blades are designed to transfix and then clamp firmly small areas or layers of tissue between their grasp, and at the same time to serve as a mechanical guide which limits and directs the scalpel or scissors in any given direction of dissection. They nest or *spoon together* like a pair of silver forks; one of them having small sharp tines or prongs like those of a common eating fork, while its companion presents a flat surface to its fellow, and is armed with short, sharp, and very small teeth, which interdigitate with the tines or prongs. The method of using it is as follows: The tined blade is first thrust in underneath the tissue to be removed, when the clamping blade is pressed down upon it, and its hold secured by a catch spring and the small teeth, which bury themselves in the tissues.

A scalpel or curved scissors now is made to cut along

under the surface of the tined blade, freeing the instrument from its position where it has been embedded in the tissues, and leaving the separated tissue adhering by one end. Underneath this detached portion the pronged blade can be reinserted as often as necessary, and the whole finally taken off in one continuous layer; or the whole piece may be left at the point of intersection of the opposite side, to be removed by uniting the two planes of dissection at the proper centre. The tissue may in this way be so removed as to make any angle at the pleasure of the operator, and clear of all togs and shreddy bits of tissue which the bistoury or scissors often leave behind. The workmanship is in accordance with the well-known skill and excellence of the manufacturers.

Army News.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from July 19, 1885, to July 25, 1885.

ELBREY, F. W., Captain and Assistant Surgeon. Sick leave of absence further extended four months on surgeon's certificate of disability. S. O. 162, A. G. O., July 17, 1885.

STRONG, NORTON, Captain and Assistant Surgeon. Ordered for temporary field duty with battalion Eighth Cavalry, at Hillsboro, N. M. S. O. 34, Headquarters District of New Mexico, June 27, 1885.

EVERTS, First Lieutenant and Assistant Surgeon. Ordered for duty as Post Surgeon, Benicia Barracks, Cal. S. O. 70, par. 3, Department of California, July 22, 1885. (Modifies par. 2, S. O. 68, c. s., Department of California).

WINNE, C. K., Captain and Assistant Surgeon. Ordered for duty at Benicia Arsenal, Cal. S. O. 70, par. 3 Department California, July 15, 1885. (Modifies par. 2, S. O. 68, c. s., Department of California).

Medical Items.

CONTAGIOUS DISEASES—WEEKLY STATEMENT.—Report of cases and deaths from contagious diseases reported to the Sanitary Bureau, Health Department, for the week ending July 25, 1885:

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-spinal Meningitis.	Measles.	Diphtheria.	Small-pox.	Yellow Fever.
Cases.								
July 18, 1885.....	0	12	46	1	109	70	0	0
July 25, 1885.....	0	11	31	4	69	50	3	0
Deaths.								
July 18, 1885.....	0	3	9	1	21	34	0	0
July 25, 1885.....	0	3	3	4	18	18	0	0

THE PRESERVATION OF BODIES OF PERSONS DYING FROM ARSENIC POISONING.—With reference to the cases reported under this head (see RECORD May 9th) our correspondent from Lafayette, Ind., writes there was no formation of adipocere, but the bodies were preserved as if injected for dissection.

RETENTION OF URINE.—Dr. Malley recommends an ointment made of one part extract of nux vomica to ten of lard in the treatment of functional retention of urine. A piece the size of the thumb-nail is to be rubbed on the hypogastrium once or twice a day.

SCIENCE, FREE THOUGHT, AND THE BRAIN OF VICTOR HUGO.—In a recent issue *La Tribune Médicale* enters a complaint under this caption against the family of Victor Hugo, because they did not accede to the request made for an examination of the poet's brain. "If ever," the writer says, "a brain ought to have been studied in order to discover and to demonstrate the relations of the organization and structure of the organic substratum to the extent and perfection of its functional activity, that brain was certainly Victor Hugo's. In the case of Gambetta, there was found an exceptional development of the cerebral convolution constituting the organ of spoken language, and," *La Tribune* continues, "what might we not have found as regards the organ of thought and of its expression in the brain of Victor Hugo!" What indeed! We might also, though this did not occur to the writer apparently, have been enabled to locate with more definiteness than at present the organ of self-esteem and of its untiring expression. But with two such finely developed convolutions the difficulty would have been to decide which was thought and which wasn't. "As I was crossing the new iron bridge I met Tim Farley. 'How do you do, Mr. Farley?' sez I. 'How do you do, Mr. Muldoon?' sez he. Sez I, 'I'm not Mr. Muldoon.' Sez he, 'I'm not Mr. Farley.' And we looked at each other again, and bedad it was nayther of us!"

THE WOMEN'S MEDICAL COLLEGE OF THE NEW YORK INFIRMARY.—A correspondent writes that one of the recent graduates of this college, while on a visit in a Western State, was called to see a case of retained placenta. When she arrived she found the attending physician, a regular practitioner, and a man of some age, sitting by the bed fanning the patient. The young woman's opinion being asked, she said she would try Crédé's method of expressing the placenta, and failing in this, she would introduce her hand and remove it. The physician replied that the patient had lost too much blood and was, in his opinion, too much exhausted to bear the operation, but gave his consent, finally, to the trial, and suggested that the visitor should do it, as her hand was smaller. This the young graduate did, and, finding the placenta attached, removed it and secured uterine contractions. The patient did well. Another young graduate, of one week's standing, was called unexpectedly to a case attended by a homœopathic physician. The patient was unconscious and pulseless. Examination showed that the head was engaged, but the cervix uteri was separated from the body through half its extent. The young woman at once divided the cervical ring with scissors, applied the forceps, and delivered the child. The patient made a good recovery. These cases speak well for the coolness and quick wit of these young graduates, and also for the excellence of the instruction imparted to the students of the Women's Medical College of this city.

NOVEL FRAUD.—A case which well exemplifies the advisability of medical men viewing the body before giving a certificate of the cause of death is reported from Flash, near Buxton. A man, named William Mellor, of that place, lately perpetrated a most curious imposition. Having been ill and attended by a medical man, he, upon recovery, shaved off his whiskers and beard, and otherwise so altered his appearance as to induce the surgeon to believe that he was William Mellor's brother, and that the sick man was dead. Having obtained a certificate, he registered his own death, and drew the burial-money from a Foresters' lodge. Upon the discovery of the fraud, he decamped.—*Lancet.*

THE DIAGNOSIS OF SUBMERSION DURING LIFE.—The Paris correspondent of the *Lancet* writes, asking us to correct a mistranslation of his in an item on the above subject published in THE MEDICAL RECORD of May 16th. The word "*mousse*" should be rendered "froth," instead of "moss."

The Medical Record

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MEDICAL LIBRARY OF THE BOSTON CITY HOSPITAL

Original Articles.

ASTHMA.

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ASTHMA is a term applied to totally different conditions. Its meaning is changing, hence the confusion. According to Dr. Johnson, in 1824, asthma is "a frequent difficult and short respiration." According to Dr. Nuttall, 1880, asthma is "a chronic, intermittent disorder of respiration; the term is also sometimes applied to any chronic difficulty of breathing." Of old the term had no definite meaning, covering the ground now embraced by "dyspnœa." At the present time a medical teacher uses the word "asthma" only when he speaks of a condition of hard breathing brought about by spasm of the circular muscular fibres of the bronchiæ. A lay person will use it in Dr. Nuttall's second sense "any chronic difficulty of breathing," as in emphysema, pulmonary congestion from a mitral lesion, or any other cause of dyspnœa.

Spasmodic or bronchial asthma is an affection which comes on suddenly, and varies in intensity and duration, from a mere thickness of the wind to a terrible choking, from a few minutes to several days. When an asthmatic attack is on the patient's energies are bent to the act of breathing. There is a look of earnestness upon the features, which are pale and clammy, or even livid, according to circumstances. The shoulders are fixed so as to get the advantage of the pectoral muscles as accessory respiratory muscles. Very commonly the individual is spare and of the neurosal diathesis. After repeated attacks the shoulder-tips stand forward more angular than normal, so that the lean asthmatic may be recognized in the streets. A girl of ten on whom these characters are already stamped came under notice while writing this paper. An asthmatic, like a dyspeptic, is often an intelligent person; both having usually highly developed nervous systems.

At other times asthma is found with the truly emphysematous individual with the barrel-shaped chest, and a high-colored complexion; a matter which will be referred to again later on.

The circumstances under which spasm of the bronchial muscular fibres is set up vary. With the susceptible nervous system it may have as its causal relations some mental disturbance, as emotion even; or in a woman the perturbation of the catamenia may, and commonly does, excite it. Probably this aspect of asthma as a true neurosis has not been sufficiently considered. Then it has relations to food; and an attack may follow a good dinner. The late Hyde Salter pointed out that when asthma has such causal relation it is apt to come on in the small hours of the morning; and that if the asthmatic will sit up awake till the hour is past, he can escape the attack, which certainly comes on if he allows the hour of its approach to find him asleep. In one asthmatic patient a non-nitrogenized dietary is enforced by her asthma; akreophagy alone renders life tolerable. As we are seeing gouty neuroses of the heart of various kinds so gouty disorders of the respiration are looming up. In one case of sudden thick wind in a gouty man the attack, after lasting six-and-thirty hours, passed off with a sharp bilious purging. The older writers spoke of "gouty asthma," indeed. Of course, all know its relation to the inhalation of irritant matters, mechanical or chemical. In such cases organic changes in the lung are set up in time. Needle-grinders, masons who hew fine stone, like that of the Edinburgh quarries, potters who inhale the fine dust of biscuit-ware, millers, bakers, feather-dresses, millstone pickers, all, indeed, who inhale fine particles, suffer from asthma; and in time bronchopneumonia, which is fatal if they do not change their occupation.

There are other relations, however, of bronchial asthma which may profitably be considered. In persons of a highly developed nervous system the starting-point of asthma is commonly a cold. The bronchial lining membrane is so made irritable, with the consequence of this condition in turn starting bronchial spasm. There is some obstruction to the breathing in consequence of the swollen mucous membrane, which measurably lessens the lumen or calibre of the finer bronchial tubes. Superimposed upon this comes the spasm of the bronchial muscular fibres, and then an acute condition of "asthma" is set up. Such is the natural history of attacks of asthma in some very charming young women.

The recognition of the causal relations of an asthmatic attack clears up the line of treatment to be adopted. In pure primary spasm the fuming remedies are of service. When secondary to bronchial irritation then inhalations of medicated vapor are more likely to be of service. In the latter case the treatment of the first stage of bronchitis (which will be considered in the article treating of bronchitis) is also indicated. Such, then, are the ordinary relations of spasmodic asthma in persons of the neurosal diathesis.

Persons of a totally different build and physique are subject to truly asthmatic attacks, which follow upon chronic bronchitis and emphysema. In these cases, along with sacculated conditions of some portions of the air-tubes are found other areas of thickened muscular tissue; and in these tracts of muscular hypertrophy spasm is common. Habitually "asthmatic" (in the popular sense), they are liable to attacks of "asthma" to boot—engrafted on the chronic dyspnœa, and causing acute distress. Here the treatment of the attack is that of spasmodic asthma—however brought about.

There are two conditions under which asthma *spasmodica* is simulated. There is pulmonary congestion from disease of the heart; either a mitral lesion, a failing left vertricle, or dilatation, or temporary distention of the right heart. Wherever the blood-flow through the lesser or pulmonic circulation is obstructed the condition is one liable to sudden aggravation with acute distention of the right ventricle. Such a condition is commonly spoken of as "cardiac asthma"—a not inappropriate term.

The other is flatulence. When there is a sudden development of gas in the intestines, the diaphragm can not descend, and the acute difficulty of breathing is experienced. Whenever from any cause (pulmonary or cardiac, or, indeed, hepatic) there is venous fulness of the portal circulation, and with that venous congestion of the mucous membrane of the alimentary tract, gas is given off, often in considerable quantities. In old-standing cardiac disease, in old-standing disease of the respiratory organs, and especially in emphysematous conditions, such sudden evolution of gas is common; and when elas-

tic gas interferes with the descent of the diaphragm and presses upon the right chamber of the heart, acute distress is experienced. The sufferer will often call such an attack "asthma," and can find dictionary warrant for his use of the term. In chronic emphysema the diaphragm is the great matter in inspiration; and when it cannot descend, very acute distress and breathlessness result. No wonder these sufferers speak of "the wind" with considerable empressment!

When the physician is called in to a case of "asthma" his first business is to differentiate the particular case before him, and refer it to its proper class. So soon as this is done the treatment suggests itself naturally therefrom.

In "hay asthma" the existing cause is the pollen of certain plants, and specially the anthoxanthum odoratum. Here avoidance of the cause does away with the whole train of results. If the sufferer can manage it, a sea-voyage at the season would save him from his asthma. How far "hay asthma" is amenable to any line of treatment here to be suggested the writer can not say; it is not a malady grave or serious enough to come, or be brought under his notice.

Primary spasmodic, or bronchial asthma, in persons of neurosal temperament involves two lines of assault. There is the treatment of the attack and the treatment of the interval. When the attack is on, then something which will relax the muscular spasm is indicated. For the last fumes are in vogue. Nitre or touch-paper (brown paper soaked in a strong solution of saltpetre) may be burned. Himrod's powder, the solace of the late Lord Beaconsfield, is held in high repute by sundry well-known physicians liable to attacks of asthma. Cigars de Jay are the favorite resort of others. With some tobacco is sufficient. With others cigarettes of datura tatula, or datura stramonium are found serviceable. With most asthmatics these "fuming" remedies give relief—more or less complete; but with others (fortunately for them but a small class) these fuming remedies are useless and inoperative. An emetic is the only measure of any service. In one case where the lean of animals has to be eschewed entirely, on account of the asthma set up by any indulgence therein, an emetic or a bad night are the alternatives. A scruple of ipecacuanha powder at bedtime ensures a fairly unbroken night; but this is a terrible alternative. Food has to be taken early in the day, otherwise the emetic is impotent to give relief. It is a life of misery, yet borne courageously. Then local applications by means of vapors (produced by the spray) give relief in some cases. Sulphurous acid, nitrate of silver, and other medicaments have been tried with advantage. At one time lobelia inflata was a fashionable remedy in asthmatic attacks, and is certainly worth a trial in many cases, though a nauseous remedy.

Then as to the treatment of the interval. First and foremost comes belladonna, a potent stimulant to the respiratory centre, while at the same time it relaxes all circular muscular fibre (this statement is made deliberately). Then ipecacuanha is good, and the two may be combined in pill advantageously. Arsenic often gives good results. Of course the vegetable tonics of all kinds and hæmatics suggest themselves; it is unnecessary to run over the gamut of tonics. Locality is a great matter. In one place the asthmatic is at ease; in other places residence is one prolonged agony. Change of locality is a matter to be discussed in all severe asthma. In catamenial asthma sometimes it is enough to give belladonna, or bromide of ammonium, as the case may be, at the flux, with some appropriate treatment in the interval. In asthma caused by the inhalation of irritants change of occupation may be essential to relief. The grinder or mason may enter the police force or enlist. Then there is asthma secondary to an irritable congested condition of the bronchial lining membrane, catarrhal asthma. Here inhalations of steam, plain, or medicated, give great relief. To relax the turgid vascular mucous membrane (see article on Bronchitis) is to give relief. It is usually a persistent first stage of bronchitis, of a dry membrane with arrested secretion, which starts up the spasm. Fuming remedies here usually rather aggravate than allay the condition. Hence the importance of a correct diagnosis as to the causation of the spasmodic condition when called in to a case of spasmodic asthma. How far a chronic irritable condition of the bronchial lining membrane underlies recurrent asthma is a subject needing further investigation; it seems probable enough. That such a condition should exist in persons of the neurosal diathesis—the chosen subjects of asthma—is in harmony with one's experience of such persons; a distinct class, having features of its own. Asthma, neuralgia, migraine, dyspepsia, neurosal skin affections, as herpes, in women dysmenorrhœa and disturbances called hysterical, are the maladies which these "neurotics" step into as part of their inheritance.

Cardiac asthma carries with it its own appropriate treatment. Here the matter par excellence is the distention of the right ventricle, threatening paralysis in diastole. To prevent this untoward event two measures suggest themselves. One is to relieve the engorged venous system and right heart by venesection; and certainly in all grave cases the lancet should be brought on the scene. Relief being so afforded the distended muscular chamber can once more contract upon its contents. The other is to flog on the heart by the external application of heat, as hot poultices to the front of the chest, or hot water in an india-rubber bottle (as that used to warm the bed), and by stimulants. Alcohol (in unstinted quantities if need be), ammonia, digitalis, strychnia, belladonna, all are useful. Sometimes alcohol is the only measure at hand, and must be used freely. In a lone farm-house the whiskey-bottle may be the only available medicine. To push stimulants and to bleed at one and the same time are not antagonistic measures; and the combination is indicated in severe cases.

In cases presumably of gouty origin a mercurial followed by a sharp dose of laxative medicine is the first step to take. Indeed, in other cases experience may have taught the sufferer that prompt action upon the liver will commonly avert or abort the attack. Asthma, like epilepsy, is in some cases preceded by the free indulgence of the palate or neglect of the bowels. Attention to the general health and the correction of everything amiss are often as essential as a complete equipment of fuming remedies for an asthmatic.

Asthma (or dyspnœa) of flatulent origin is a very common occurrence with many persons, and specially invalids. Here, of course, the fuming remedies are useless. Emetics may give relief. Carminatives certainly do. Essence of ginger or peppermint, cayenne in pill with breadcrumb, sal volatile, all are good. But perhaps best of all is the old Scotch wife's plan (advocated eloquently by the late Sir James Young Simpson, Bart.), viz., to put as much black pepper as will lie on a sixpence or a dime into a teacup, and fill half up with hot water; then drink all. This can be repeated at short intervals if necessary.

It is quite clear that in each and every case of asthma, indeed, perhaps every attack, no stone should be left unturned, and every association should be weighed in relation to it. Attention to the causation will guide the treatment in one case; the experience of the afflicted individual at other times is invaluable in giving direction to our therapeutic endeavors. Asthma is a complex matter, with different pathological conditions (speaking of the term in its broadest sense) and varied clinical features. Equally capricious is the malady in its amenability to remedial measures; as variable as a coquette with her favors. What suits one case utterly fails with another—to all intents and purposes as like it as two shrimps are to each other. No one can tell why or wherefore! The locality which is preservative against asthma with one may provoke it with another asthmatic. "A gentleman, mentioned by Dr. Bree, could never sleep in the town of Kilkenny, in Ireland, without being

attacked by asthma; and Lord Ormond could never sleep out of the same place without suffering in the same way" (Forbes).

But, granting all this, it is possible to so approach most cases of asthma as to elicit its associations, and on a correct and ample diagnosis to assail it on a distinct principle, and so to cope with it successfully, provided sufficient pains be taken in each case.

EXTRACTION OF A LENS, DISLOCATED INTO THE VITREOUS, WITH THE AID OF DR. C. R. AGNEW'S BIDENT.[1]

By DAVID WEBSTER, M.D.,

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JAMES B——, aged sixty-eight, a native of Scotland, salesman in a lumber-yard, of correct habits and of good general health, received a blow upon his right eye from a chip of wood which he was chopping some time in November, 1883. There was immediate loss of vision, with severe pain, and considerable ecchymosis of the lids followed. Under the care of his family physician the pain and inflammatory symptoms subsided, but the disturbance of vision remained. This led him to seek expert advice, and in February, 1884, some three months after the injury, he consulted Dr. C. R. Agnew at the College of Physicians and Surgeons. He was found to have a dislocated lens, but as the eye was "quiet," and as the vision of the other eye was $\frac{20}{30}$, no operative interference was advised. He visited the clinic at the Manhattan Eye and Ear Hospital a few times with like result. From that time nothing noteworthy in his case occurred, except some impairment of the sight of his left eye from incipient cataract, until Friday, May 1, 1885, when he awoke before daylight with a severe pain in and around his right eye. He was, at the same time, attacked with cramps in the stomach and vomiting, which continued through the forenoon. On looking at his eye by means of a mirror he found that it was bloodshot, and that the color of the pupil had changed from black to white. In the evening of that day he was seen by Dr. Neil J. Hepburn, Assistant Surgeon to the Manhattan Eye and Ear Hospital, and to him I am indebted for careful notes of the case. Dr. Hepburn found a cataractous lens incarcerated in the pupil, partly in the vitreous and party in the anterior chamber. He noted extreme ciliary injection and increased tension, with vision reduced to perception of light. He applied a four per cent. solution of cocaine hydrochlorate freely several times, at intervals of a few minutes, but this had no effect in relieving the pain. He then resorted to the use of the sulphate of atropia, a solution of four grains to the ounce, which gave considerable relief, but which did not release the lens from the grasp of the pupil during the time that he remained with the patient. The use of atropia was continued, at regular intervals, until I saw the patient the next day at 3.45 P.M., along with Dr. Hepburn and Dr. M. Donnelly. The lens had, by that time, become disengaged from the pupil, and was lying loose in the vitreous humor, a portion of its periphery presenting at the lower border of the pupil. On the slightest movement of the eye it floated about freely, appearing to have no attachment in any direction. The pain had mostly passed away, and the tension of the globe was nearly normal. The eye was still very red, however, and the vision had not risen above perception of light.

Having decided to attempt the extraction of the dislocated lens, a four per cent. solution of cocaine hydrochlorate was dropped into the eye half a dozen times at intervals of a minute or two, the eyelids were separated by a Graefe's speculum and the conjunctiva of the upper part of the eyeball was seized with fixation forceps in order to steady the eye. Dr. Agnew's bident was then passed through the temporal side of the eye-wall, the points of puncture being about three millimetres back of the sclero-corneal junction, and was swept around back of the floating lens, which was easily pressed forward into the anterior chamber and against the cornea, by depressing the handle of the instrument and thus elevating its points. The bident was then pressed forward and made to transfix the nasal wall of the eye, the points of counter-puncture being about two millimetres from the limbus corneæ.

The lens being thus safely secured in the anterior chamber, I made, with a Graefe's knife, an incision downward of about the same size and position as in ordinary cases of cataract extraction. I then tried to pass a wire spoon between the lens and the bident but failed to do so because the latter had been pressed too firmly against the former before transfixing the opposite wall of the eye. The central portion of the lens evidently protruded backward between the prongs of the instrument. I therefore withdrew the bident, and the lens, remaining where the bident had placed it, because adherent to the cornea, was removed with the spoon without difficulty. The speculum was quickly removed, so that only a few drops of vitreous escaped. A flannel bandage, with absorbent cotton, covered with a black silk mask, constituted the dressing. Dr. Hepburn took charge of the patient and I did not see him again until after his recovery.

The bandage was removed on the fourth day, and a drop of a four-grain solution of eserine was instilled to draw the iris away from the wound. The eye was opened and carefully inspected on May 9th, seven days after the operation. The wound had healed, and there was an adhesion of the iris at its outer extremity. The patient easily counted fingers with the eye, although some lens-matter still remained in the pupil. At no time after the operation was there any pain. The lens-matter gradually settled down and disappeared by absorption, while by the use of eserine the synechia became so attenuated and stretched that the pupil was nearly circular.

June 15th.—R. V. $= \frac{6}{200}$, made $\frac{20}{200}$ with $+ \frac{1}{48}$; L. V. $= \frac{20}{20}$, made $\frac{20}{40}$ with $+ \frac{1}{36}$. The patient has been attending to his business since June 1st.

July 13th.—R. V. $= \frac{20}{100}$, with $+ \frac{1}{48}$. So far as my observation goes this case is unique. Here we have a dislocated crystalline lens, which has been ploughing about through the vitreous for over a year, and finally becoming accidentally incarcerated in the pupil, and setting up a glaucomatous inflammation, threatening the destruction of the eye, removed with very little difficulty, and the eye saved with vision sufficient to rank as a "success" after an ordinary cataract extraction. Before the invention of the bident such an eye would probably have been enucleated for the relief of pain and to prevent possible sympathetic inflammation. Or perhaps an iridectomy or a paracentesis would have been performed, leaving the dislocated lens in the eye, with all the conditions necessary to repeated attacks of inflammation, leading possibly to total blindness. With the bident I believe many an eye will be saved which, without it, would have been inevitably lost. It may not be applicable to all cases of dislocated lenses. I certainly should not use it where the lens is already dislocated into the anterior chamber, or even where the dislocation was only partial, but in all cases where the lens is floating about in the vitreous, and can be brought into view, I think the instrument may be used with advantage. Without the bident I do not think it is always possible, even when the dislocated lens can be plainly seen, to remove it from the eye, even with great loss of vitreous. If a lens, becoming dislocated during the initial steps of an ordinary cataract extraction, sometimes disappears in the depths of an eye, and cannot be fished out with hook or spoon by the most expert operator, how much more liable is such an accident to occur in a case where the lens is already loose in the vitreous. But if with the

[1] Read before the American Ophthalmological Society, July 15, 1885.

bident you press the lens into the anterior chamber and hold it there, you are not only sure of getting it out of the eye, but its presence acts as a kind of a plug to the pupil, preventing escape of vitreous. The objection to wounding the ciliary body in this way I do not consider a grave one. The clean punctured wounds heal without much secondary cicatricial contraction, and, in the two cases in which I have seen it used, have left no visible scar. Those who have practised "Hancock's operation" for glaucoma, which is essentially an incised wound of the ciliary body, say they have never seen sympathetic inflammation result from it.

I shall close this paper with citations from two of our well-known text-books on the eye.

"If the lens is completely dislocated into the vitreous humor, and is setting up no disturbance, it is wiser not to interfere. But if inflammatory complications arise, or the sight is much impaired by the lens floating about across the pupil when the eye is moved, it will be best to remove it. . . . The operation is, however, very dangerous, for a considerable amount of fluid vitreous will be lost, and severe irido-choroiditis, with subsequent atrophy of the globe, may supervene" (Wells).

"The removal of the lens is especially indicated in cases in which inflammatory symptoms have already appeared. Unfortunately, the removal of the lens from the vitreous involves so great a loss of that fluid, while the difficulty in extracting the lens is so great, that the operation can hardly be said, at present, to come within the sphere of practical surgery, and it is better in such a case to enucleate the eye" (Juler).

THE PULLEY MODIFICATION OF HIS LIMITING TENOTOMY AND ADVANCEMENT OF THE RECTUS OPERATION.

WITH A REPORT OF A CASE OF SECTION AND ONE OF EXSECTION OF THE RECTUS.

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IN the St. Louis *Medical and Surgical Journal*, June, 1881, subsequently in H. D. Noyes' "Diseases of the Eye," appeared the publication of my method of advancing the rectus for the correction of extreme degrees of strabismus and of affording a safeguard against the danger of

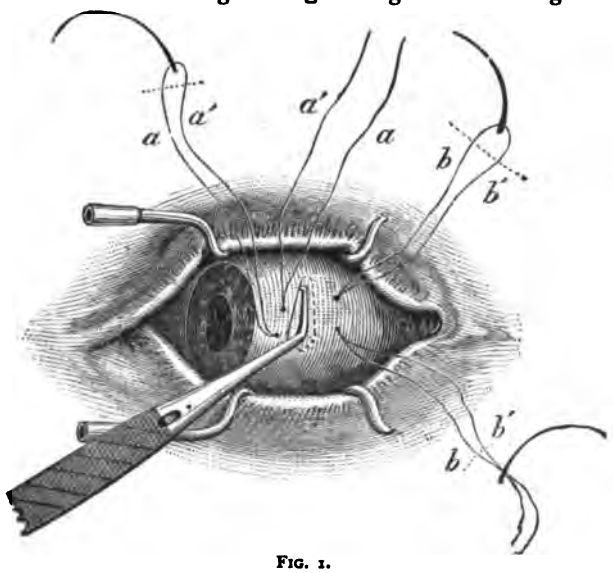

FIG. 1.

over-correction in moderate and minimum degrees of deviation. The advantage then claimed over other methods, and since that time personally acknowledged by a number of careful operators, was twofold: First, that of avoiding the tendency on the part of the stitch to *split the theca* of the rectus, allowing it to retract, thus compromising the result of the operation; second, a desideratum long felt, but not heretofore attained, viz., that of enabling the operator to *modify the effect* after several hours, when recovery of the elastic tension and muscular contractility shall have occurred.

By the *double loop suture* (see Fig. 1) an attempt to gain both of these advantages was made. As to the first of them, both in my experience before publication and during the past three years, and also in the use of the operation in the New York Eye and Ear Infirmary, its results have been satisfactory, when the suture has been firmly secured to the *sclera*.

Not so much has been substantiated by additional experience as to the universal success of the second advantage claimed. In tying suture *a*, after twisting both branches together, with suture *b*, similarly treated, four threads form the knot, which renders the manipulation of tightening or loosening more difficult and less precise

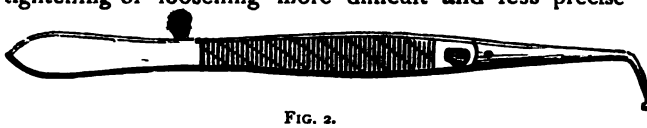

FIG. 2.

than when but two threads are employed. In my present operation, to be described below, this difficulty, of modifying the effect by changing the tension of the suture, is overcome by forming a loop or pulley with *a*, through which passes one branch of suture *b* (see Sec. 7).

The formation of this suture and its action will be perfectly understood by reference to the following brief description of the operation:

OPERATION.—1. The patient being cocainized, a medium-sized antiseptic silk suture, *a a'*, is introduced into the *dense* superficial scleral tissue[1] two millimetres from the corneal margin.[2]

2. The conjunctiva and Tenon's capsule are opened in the usual manner.

3. One branch of the *fixation advancement forceps* is introduced and the remaining branch closed down on the conjunctiva, grasping the tendon of the rectus, which is now to be separated from the sclera with the strabismus scissors.

4. The muscle having been elevated by the forceps, both needles of the double loop suture *b b'* are introduced from beneath through Tenon's capsule, muscle, and conjunctiva, including the middle portion of the rectus, sufficiently far back to allow for the portion to be excised. This step will be further facilitated by the use of the advancement needle illustrated below.

5. The forceps still remaining elevated, the belly of the muscle is severed by the scissors two mm. on the corneal side of the suture *b b'*.

6. The needles being cut away, four independent sutures are formed, viz., *a*, *a'*, *b*, and *b'*.

7. Ignoring *a'* and *b'*, one branch of suture *b* is crossed over suture *a*, both branches of which are now tied down enclosing *b* in a loop or pulley.

8. Both branches of *b* are now tied together, and it will become apparent that *in proportion as they are tightened* over the pulley formed by *a* will the cut end of the rectus be approximated to the insertion of the tendon, simultaneously closing the conjunctival gap.

9. A bow-knot is applied, by loosening which the effect may be modified, after several hours. If all is then satisfactory, sutures *a'* and *b'*, which are reserve sutures to be used in case of entanglement, are now withdrawn. The eye is washed and dressed with absorbent cotton kept wet with a one-half per cent.

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[1] A theoretical objection has been made that the suture *a a'* will not hold, since it involves so little tissue, as compared with that of Wecker, Graefe, Agnew, and others. This objection is answered by emphasis placed on the words *dense superficial scleral tissue* (Sec. 1). After introducing the suture (which should be done in exactly the same manner as Knapp introduces a guy into the sclera for increasing the effect of an internal tenotomy), its security should be tested before proceeding further.

[2] The difficulty of securing a needle both sharp and slender which may be introduced into its dense superficial scleral tissue without much resistance has been overcome by those of Lüer, Paris, which have hitherto been used. They have been successfully duplicated and will be furnished by Tiemann—needle No. 25.

aqueous solution of acid. carbol. pur., plus ten per cent. of glycerine.

The stitches may be removed on the fourth day. Usually, the tendon of the opposite rectus is divided as a preliminary step. In case of over-correction following a faulty operation in which the belly of the rectus, in place of the tendon, has been divided, it is impracticable, if of long standing, to advance the receded muscle, in which case the opposing muscle is to be divided back of its transit through the capsule and the advancement stitch introduced in the opposite conjunctival tissue, as in the first of the exceptional cases described below. In case of complete paralysis of either rectus, the opposing muscle should be exsected or divided as far as possible back of the capsule of Tenon, inserting the advancement stitch in the opposite tissue should the tendency to deviate still continue.

LIMITING TENOTOMY SUTURE.—The substitution of the pulley (Sec. 7) in place of the original form constitutes an especially safe and effective procedure to afford security against the danger of over-correction, first, in those cases in which one desires to produce extreme effect by extensive division of the capsule; and, second, in the minimum degrees of deviation which compromise comfortable binocular vision. In these cases single sutures are used, and *b* is introduced

FIG. 3.

further forward, simply dipping into and out of the muscle with a sharply curved needle, which is made for me by Tiemann.[1]

Care being exercised to exert no traction on the hook, thus avoiding temporary paresis and diminishing the

FIG. 4.

danger of subsequent deviation, both conjunctiva and capsule are divided, together with the tendon, after which the effect is limited by gradually tightening suture *b* over pulley *a*, as in the advancement operation, until the symmetric effect is perfect, or better, when possible, until vertical double images are produced by a prism with horizontal axis.

CASE I. *Over-correction of internal strabismus followed by extreme external deviation of both eyes with limited motion.*—The following case is an illustration of what is fortunately much less common now than twenty years ago, when the importance of the relation of the anatomy of the capsule of Tenon to the operation of strabismus was seldom recognized by the numerous travelling so-called oculists and general surgeons, who, without the knowledge of refraction and its relation to strabismus so prominently brought before the profession by Donders in his "Anomalies of Refraction," conceived no other essential for a successful operation than that of "hooking up the muscle and cutting it off." The trail of these empirical peripatetic strabotomists is marked by such cases as that of Mr. Barney B——, of Sidney, Ill., aged forty-three, who consulted me April 24, 1883, and whose experience will be appreciated by reference to the accompanying photo-engraving, in which effort has been made to preserve the exact appearance which he presented with the following history: Twenty-three years ago his father entertained a guest over night, who made it his business to travel the country and straighten cross-eyes. The young man having an internal squint, it was considered a rare fortune thus accidentally to have presented an opportunity which might never occur again, for they were poor, and he was willing to straighten both eyes for his lodging and $2.50. A week later, when Dr. Strabotomist was pursuing his calling many miles away, it was considered safe to expose the eyes to the light, when the condition was revealed which has suffered no material change since that time.

Both eyes were deviated extremely outward, measuring with Snellen and Landolt's method[1] 50° in the right eye, of which a portion of the iris was concealed under the external canthus and the lateral motion limited to 10°. With H. = 1.5 D. (or $\frac{1}{24}$) corrected, V. = $\frac{20}{40}$. In the case of the left eye external deviation was 40°, lateral motion 15°, H. = 1.5 D., V. = $\frac{20}{40}$. Direct vision was very imperfect, but by turning the head to bring objects in the visual axis of either eye he could see tolerably well. As he was very anxious to have an effort made for which I knew no precedent, I explained to him that I would attempt as bad an operation on the external muscles as his $2.50 operation had been on the internal muscles, and that I hoped by the aid of a stitch to be able to draw the eyes over and hold them in position, and to effect a parallelism of the eyes, so that he would look well and have direct vision, but that he must not expect to have lateral motion, for, with the lateral rectal attachments of both eyes destroyed, he must be satisfied if they were simply straight. With this understanding, the operation was undertaken. A lateral incision was made above each external rectus and the hook introduced far back, exposing the muscle, which was divided outside the capsule. An internal advancement suture was placed in each eye, and no deviation made from the usual after-treatment. The weak carbolic acid wash was acceptable to the patient, and prevented inflammation. No pain followed the operation, which was done under ether. On the fourth day there was a deviation of 5° inward.

The most gratifying and at the same time *surprising* fact, especially worthy of note, was the *unpredicted amount of lateral motion*, which in the right eye amounted to 40°, and in the left to 45°. As this is the only case of the kind known to me, I am unable to compare it with reference to this point, and the theoretic explanation is offered that both external and internal recti

[1] This needle will be found greatly to facilitate the introduction of suture *b b'*, when the tendon has retracted with the capsule. The correction is then made without difficulty after dividing the conjunctiva and slipping the needle as a strabismus hook between the capsule and the sclera when a half-rotation with depression of the handle brings the point out through the conjunctiva. The short end of the thread is then caught with toothed forceps and the point retracted. Without removing the thread the point is reintroduced and the thread caught on the same side of the needle as before, when the withdrawal of the needle leaves the suture *b b'* in position, exercising a firm hold on the muscle, which may then be brought forward and secured. This needle will be sent on approval by Geo. Tiemann & Co., when its action will become manifest. By its curve also the coaptation of the conjunctival edges after enucleation, as well as the introduction of the sutures in canthoplasty, is facilitated.

[1] Bestimmung des Schielens. Snellen u. Landolt. Handbuch der Augenheilkunde. Graefe and Saemisch, vol. iii., p. 235.

formed a union with the posterior hemisphere of the capsule, for it is scarcely probable that so great an amplitude of motion could be accomplished by the recti muscles acting alone on the orbital cellular tissue. An application of this theoretical view will appear in the treatment of the following case. The above case being of unusual interest, the result, photographed before his departure, ten days after the operation, completes a unique history, with the good result continuing to exist to the present time.

CASE II.—Mr. T. A. D——, Oneida, N. Y., aged about thirty years, presented himself at the College of Physicians and Surgeons, New York, with a condition of complete paralysis of the external rectus of the left eye, following a railroad accident twelve years since. In the collision his head was jammed between two cars. The recovery from the injury was rapid, leaving no other effects than an extreme internal deviation with partial concealment of the iris. Some years since an unsuccessful operation was performed. Tested at the College and at the Manhattan Eye and Ear Infirmary, several days later: V. = counts fingers at 6 inches; internal deviation about 50°; absolutely no motion.

FIG. 5.

Having the good fortune to be in the city, the courtesy of Dr. Webster was extended in an invitation to demonstrate my method of advancement, on the following day, at the Manhattan Eye and Ear Infirmary. From the experience of the case related above I considered that a simple section of the muscle back of the capsule would be insufficient; that an attachment to the posterior hemisphere would probably occur, and reproduce a partial internal deviation. Determination was therefore made to exsect the muscle as far back as possible to avoid this danger, the intention being to destroy the efficiency of the internal rectus. Under the influence of cocaine, the globe was rotated, with fixation forceps, as far to the temporal side as the contracted and hypertrophied muscle would permit, in order to allow of the introduction of the hook. Having no reliable advancement forceps, a thread was passed around the muscle after Agnew's method. Parallel lateral incisions were made above and below the muscle, which was drawn out by the continued traction of the hook, and divided, at the remotest visible point, and the anterior portion was then separated from the sclera. An exsection and advancement of the external rectus was made, and the eye kept moist with saturated solution of boric acid, on cotton, a favorite and efficient remedy of Dr. Webster and other members of the Infirmary staff. No pain or special elevation of temperature followed the operation. The stitches were removed on the fourth day. The eye was perfectly straight. No exophthalmos or unnatural appearance except the absence of lateral motion. After a week V. = $\frac{20}{20}$; in a direct line has binocular fixation, but lateral motion of the head either way causes diplopia. He left the hospital satisfied, with still some little ecchymosis, rapidly absorbing.

Taken in connection, we conceive the above cases to have sufficient interest and value to justify their publication, inasmuch as they initiate a discrimination between the indications for section and exsection of the belly of the rectus.

UPON THE ORIGIN OF TUMORS AND CANCERS.[1]

BY THEODORE A. McGRAW, M.D.,

DETROIT, MICH.

SINCE the publication of Virchow's "Cellular Pathology" and his great work on "Morbid Tumors," the current of professional public opinion has run almost altogether in favor of the dogma of the local origin of tumors and cancers. It cannot be denied that the arguments in its support seem at first sight to be very conclusive. A cancer of the breast begins as an apparently local trouble, it grows and spreads, and new lumps form in the neighborhood of the primary tumor. The neighboring lymphatic glands become next affected, and afterward those which are more distant. Then metastatic tumors form in distant parts of the body, and finally a cachexia develops which soon ends in death. Or a boy receives a blow in the eye, from the effects of which it becomes inflamed. The inflammation, however, does not pursue its usual course but develops a sarcoma, which soon kills the patient. In these and in most cases of tumors the influence of location and local irritation is so manifest as not to be mistaken. The progress of the disease, whenever it assumes a general character, is apparently from a local lesion to a constitutional infection, and it is natural for practical surgeons to incline to a theory which not only promises possibilities of cure, but also seems well sustained by the facts of the case and the results of treatment. For it is certain that the plans of treatment based upon this hypothesis have had far greater success than those established when it was universally believed that cancer was primarily constitutional—infecting the blood from the very beginning. The quick and thorough excision of every malignant growth has saved thousands of lives, and every surgeon of experience can now show cases in which tumors of undoubted malignancy have been so successfully removed that no recurrence has taken place after many years; and yet, notwithstanding this vindication which the theory has received from actual practice, there arises certain arguments which make us doubt sometimes whether one's ancestors were altogether wrong, and whether, after all, besides the causes which influence its production, there must not be behind some abnormal constitutional condition, without which neither cancer nor tumor could arise to vex the body. It is to call attention again to this constitutional something that I venture to write this paper, even at the risk of shocking that pathological faith in the localization of this kind of disease which has become nearly universal in the profession. It is my purpose not to deny the influence of local causes in the production of neoplasms, for I firmly believe in them as partial factors, but I insist upon the recognition of those other groups of facts which demonstrate to my mind beyond doubt that the theory of local origin is insufficient to account for all the phenomena, and that cancers and tumors arise from the combined influence of constitutional as well as local conditions.

[1] Abstract of paper read before the Michigan State Medical Society.

I find it necessary, however, at the very outset, to say that I do not regard the word "constitutional" as synonymous with "pertaining to the blood." It is very curious, that with full and undoubted faith in the doctrines of a solider pathology, the profession have not been able to divest themselves of certain conceptions which are consistent only with systems of humoral pathology. The most persistent of these fancies is the inborn belief that a constitutional dyscrasia must reside in the blood. If we ask a surgeon to-day whether a cancer is primarily constitutional, he will answer, "No; it appears first in the solid tissues, and the blood becomes only secondarily affected; therefore, cancer is of local origin."

Now it may be a question whether any disease has a constitutional origin in the sense understood by our fathers, and it has seemed to me that an unnecessary confusion has been caused by this misunderstanding of the word "constitutional." Unless we would abolish it altogether—and no one would think of doing that—we must give it a meaning more in consonance with our prevailing theories. There are, in fact, very many possible constitutional conditions in which the blood itself would be affected only secondarily, if at all, and which must be recognized as possible factors in the production of disease. Of these we may instance, first, any general degeneration of the blood or lymphatic vessels. When we think of these vessels in their actual relations, how they penetrate into nearly all tissue, how all tissue depends upon them for their nutritive supply, and how they govern all of the processes of inflammation and repair, we must admit that any disease affecting them generally, must exert a positively deleterious influence upon the whole animal economy.

The same is true of the vaso-motor nerves, which have an immense though not yet well-understood or sharply-defined influence upon the nutrition of the higher animals. Certain glands, too, have their relations with the whole body, so vital in kind, that even a disturbance of their functions may be regarded as a constitutional disease.

Let us suppose that we should find, as a matter of fact, that cancer was caused by some abnormal condition of the kidneys or liver. Should we not say that it was of constitutional origin?

The fact that the original disease—that of the kidneys or liver—was local would not affect the state of the case as regards the cancer, for that would depend upon a condition common to the whole body. The same would be true if it resulted from disease of the system of blood-vessels or of the nervous system, or from any condition which had become general, and of which cancer was a secondary result. Thus a general loss of power in the tissues of the body to maintain their integrity in the face of disturbing causes must be regarded as a constitutional condition, and we are obliged to assume the same even of such cases where a tissue is studded with primary germs of tumors. Multiply a local condition indefinitely, and we haye finally a constitutional condition. Now, this faith in the local origin of tumors and cancers has given rise to many speculations in regard to the exact nature of the local influences which are able to produce such disastrous results. The most famous of these is the hypothesis of Cohnheim, who supposed that all neoplasms, of whatever kind, had their source in residual germs of embryonic origin. These germs were believed to consist of superfluous formative material which was not needed in the development of the various organs, and remained in a latent condition buried among the completed tissues, and retaining their embryonic power of evolution. They were then liable under any sufficient stimulus to become active and develop, at a time when they could serve no physiological purpose, into masses, whose relations with the rest of the organism must of necessity be abnormal and illegitimate. Such germs as dated from the earlier periods of embryonic life were credited with enormous powers of growth and multiplication and a peculiar aggressive force, against which the normal tissues were powerless. In this way was accounted for that peculiar power of malignant growths by virtue of which cancers and sarcomata were enabled to infect the body. How plausible such a theory would seem to the ardent believers in the doctrines of local origin is of course apparent. I was myself very enthusiastic in my reception of the hypothesis at the first reading, and the idea was especially welcomed because it seemed to place on a firm basis that doctrine on which surgeons based their most ardent hopes of success in their struggles against malignant diseases.

It must not be forgotten, however, that even Cohnheim was obliged to incorporate in this theory an hypothesis of constitutional influence in order to account for the long periods during which these germs lie latent, notwithstanding their subjection to the most varied kinds of irritation.

He imagined that every normal tissue had the power of resisting the encroachments upon its territory of any and every other tissue, and that only when the power of resistance had from any cause been lessened or lost did it become possible even for the most aggressive germ to develop and grow. In this admission he may be said to grant the whole question of a constitutional origin for tumors and cancers. Whether we are disposed or not to think well of this speculation, it is probable that our bodies, so to speak, swarm with germs which await only the proper stimulus to develop into tissue. Every regeneration of tissue after injury points to this conclusion. The immense growth of integument over large tumors, such as the large lipoma of the back, shows the vast capacity of normal tissue to develop under the proper stimulus. Whether the germs which then develop, or which develop into morbid tumors, are of embryonic origin, is, however, quite another question. In any case this may be regarded certain, that the mere presence of a potent germ is insufficient to account for its growth. The uterus, for example, is supposed by Cohnheim to contain vast masses of such germinal material which are vitalized by nature in pregnancy to enable the womb to grow to the necessary size and capacity, and which when cheated of their proper destiny are apt to develop into fibroid tumors. In fact, however, the vast majority of maiden ladies and childless married women are not afflicted with fibromata or fibro-myxomata, even though the uterus may have been stimulated by frequent or even habitual sexual intercourse. It is evident that there is in normal life some restraining power, some constitutional government which does not permit every rebellious cell to sprout and grow after its own fashion. While the origin of very many tumors from embryonic germs must be considered exceedingly doubtful, there is a class of growths which can be explained in no other way than by referring their beginning to anomalies of development. These are the dermoid cysts, the parotid enchondroma, the adenoma of the axilla, Grawitz's tumor of the kidneys, and some others. The peculiarity of their class is that they present examples of growths composed of adult tissues which are heterologous to the tissue in which they are located.

The explanation of such tumors by the assumption that they have sprung from aberrant or dislocated germs, which in some early period of fetal life by some hook or crook have got into strange neighborhoods, has of late years gained much credence among pathologists. Putting aside the dermoid cyst of the ovary and of the testes, whose origin is obscure, it seems highly probable that those which are formed along the edges of the branchial clefts, on the line of junction of the ventral lamina, are due to the infolding of the edges of the epiblast at its line of union, and the burial of some of its germs among the deeper parts. We may believe, too, that a cartilaginous tumor of the parotid may have had its origin from some germ accidentally detached from the ear. The adenoma of the axilla may in early life have formed part of that material set apart for the formation of the mammary

gland, and that those tumors of the kidney which, as Grawitz has demonstrated, exhibit a structure like that of the suprarenal capsule, may be reasonably supposed to have been portions of that organ which had become embedded in the kidney during its process of evolution. It is possible that those theories may be all wrong, and that the whole process of evolution may have got awry in such a way as to cause tissues which ought to develop from the epiblast to develop from the mesoblast, and *vice versa*. However that may be, it is highly probable that all tumors of this kind are due to some anomaly of embryonic life. It is a striking fact that since the attention of pathologists has been directed to this point the examples of heteroplasia have rapidly accumulated. It has, indeed, become the fashion for ambitious pathologists to hunt in morbid tumors for structure which would indicate this kind of origin. One important investigation has, however, been apparently neglected, and that is the careful examination of fetal organs with the view of determining to what extent a certain dislocation of germ is the rule during the process of evolution. It is, for instance, by no means impossible that nature may do her work habitually in a somewhat slovenly manner, and that the epiblastic germs may usually, if not always, become infolded and buried in the mesoblast during the process of uniting the various embryonic laminæ. The investigation of tissue and organs shortly after their differentiation might do much to clear up this question, a most vital one, as I regard it, in the pathology of these growths. Should we find that processes are habitual, which we have become accustomed to regard as exceptional, the whole subject would assume a different aspect. At present we infer that these tumors are due to the dislocation of germs, but if this kind of dislocation should prove to be the rule of evolution, we should then have to ask why, in a given case, the dislocated germinal matter, which in the natural course of things, as nature completed her work, ought to have been disintegrated and absorbed, has been able to persist, develop, and grow in defiance of physiological laws.

It is a serious question, too, whether every heterologous group of cells ought to be called a tumor. When particles of the epiblast, which, normally developed, would make a square inch of skin, become buried in the mesoblast and form there a square inch of similar tissue, is that a tumor in the same sense that a lipoma is a tumor? Extra fingers and toes growing from superfluous germs, having become attached, by a thread of connective-tissue, far from the normal location of fingers and toes, are they to be regarded as tumors? When a tooth grows down into the body of the lower jaw, or, as I once found one, in the upper part of the antrum, is it a tumor? In short, should mere dislocation of tissue be sufficient to constitute a neoplasm in the same sense that a lipoma or sarcoma is a neoplasm? There is one property that they have in common with true tumors. They persist in defiance of that general law of nature by virtue of which useless structures atrophy and disappear. That law is so decided in every other condition, whether physiological or pathological, that the exceptions seem to be confined to tumors alone, and to be their one pathological symptom. A tumor might be very correctly defined as a mass of useless tissue which develops, grows, and persists in defiance of physiological laws. The alveolar process disappears after the loss of the teeth, the breast and womb atrophy after the climacteric period, the unused bone becomes soft and thin, the muscles of a stump undergo fatty degeneration. Where, excepting among tumors, do we find an exception to this rule? In other respects these tumors of embryonic origin differ from many others, and notably from cancer and sarcoma. They exhibit in the first place that diversity of structure which we should expect from the development of a material which contains in itself the potentiality of all tissues. In dermoid cysts we find epidermis, hair, bone, teeth. The enchondromata of the parotid is usually a tumor of mixed tissues; the adenoma contains both the glandular structure and the connective-tissue in which it finds its support. The mole is a medley of sebaceous glands, hair, epidermis, and sweat-glands; and the several tumors which spring from embryonic vestiges are always remarkable for the variety of their contained tissue. Should we not expect the same phenomena in all tumors, if, as Cohnheim supposes, all tumors spring from such potential germs? This is, however, not the case. A cancer is composed of the simplest form of epithelial cells. It not only shows no variety of tissue-formation, but its epithelial cells are always of the same kind. If the mother tumor is composed of cylindrical epithelium, every secondary knot in the whole body will show the same formation.

A sarcoma, unless it springs from some embryonic residue, shows usually one form of young connective-tissue cells, and but one, and the secondary tumors repeat that form indefinitely. Now this is what we might expect from those growths springing from pre-existing adult cells, but not if they owed their existence to embryonic germs. The type of an adult tissue is fixed. Its cells may generate their successors and perpetuate their race, but they cannot change their form or character. The metaplasia of which Virchow speaks is confined, for the most part, in normal relations to immature structure, and in pathological matters presents a vexed and undecided question. It is certainly a rare phenomenon in normal adult life. As far as our present experience goes, we may safely assume that when a tumor presents in all of its parts, and in all of its generations, a fixed monotonous form of cellular elements, it owes its source to adult tissue. The term embryonic, as applied to the cells of certain tumors, has led, doubtless, to some confusion. It can be properly applied only to the form of the cells, not to its source. The young cells of adult tissue may be embryonic in form, although they do not date by any means from fetal life. I will say one word more in explanation of the term adult tissue. I understand by adult tissue one which has reached its maximum of development, no matter at what age that may occur. The epidermis of a child may be an adult tissue, while its bones may be made up of immature tissue. If, then, the question arise in regard to any given tumor, whether it was or was not of embryonic origin, I should not hesitate, as a test, to inquire into the evidence which is presented of development, as well as growth and multiplication of cells. Embryonic germs develop into vast varieties of forms while the progeny of adult cells repeat indefinitely the form of their progenitors.

Applying this test to Cohnheim's theory, we must deny that mode of origin. It is to be noticed further, before leaving this subject, that the immense power of growth and cell multiplication which some tumors exhibit, and which Cohnheim regards as an expression of embryonic energy, is more a feature of embryonic than of adult life. A fœtus grows, it is true, with vast rapidity, but it grows, nevertheless, in accordance with law, and its power of growth and evolution both diminish with age. In normal life this is the rule. As time goes on, development first, and then growth, comes to a standstill, and finally the organism in all its parts is engaged to the end in the struggle to maintain what it has acquired. The development of a tumor, on the contrary, is something contrary to all of our experience with normal tissue, and the terrific momentum which a cancer or round-celled sarcoma acquires in its progress, is something as foreign to embryonic as to adult life. Every surgeon knows by bitter experience how steadily the aggressive malignity of an infectious tumor increases with age. For these reasons I cannot but feel that the evident origin of many tumors from anomalies of development has been given a significance which the facts do not warrant. If, however, we respect Cohnheim's hypothesis, we have no tenable theory whatever by which we may explain the phenomena of cancer and tumors as a merely local disease.

Mr. Savory, who apparently respects all constitutional influences as factors in the production of these maladies, ascribes the malignancy of cancer and sarcoma to the low character of their component protoplasm. Recognizing that the so-called cancer cells are embryonic in form only, and lack all embryonic power of development, he seeks to account for their aggressive power of multiplication on the assumption that protoplasmic cells of low grade have inherent powers of growth and multiplication far in excess of tissues which are capable of higher development. In this power we are to seek for the reason of that hitherto inexplicable fact that the elements of malignant growth penetrate into all surrounding structures, growing at their expense and actually devouring their substance.

Unfortunately this is one of those explanations which does not explain; for if we grant, what is by no means proven, the truth of this assumption, we are no nearer the true mystery, for we have yet to ask how it happened that normal structures become liable to give birth to such illegitimate and formidable progeny, and in the answer to that inquiry we find involved again the whole question of constitutional or local origin. There are, however, good reasons for believing that the solution of the problem is not to be found alone in any peculiarity of the protoplasm or protoplasmic cells of the tumor. Certain ulcers of quite innocent character exist only because the epidermis of the part is incapable of producing a sufficient amount of highly organized cells to make up for the loss by wear and tear. Such epidermis produces young broods of embryonic form which lack embryonic power, but they do not grow into cancers. They are simply disintegrated and destroyed. So, too, among those diseases which are esteemed cancerous we find differences in the grades of their component cells. The elements of a cancroid of the face are, as far as we know, fully as degraded as those of an epithelioma of the lip, and those of the latter as those of a scirrhus, but the degree of malignancy is by no means the same. If, putting aside the prejudices which have grown up during a generation, we ask what facts there are which are incompatible with any theory of purely local origin of cancers or tumors, we will find them to consist of two groups, the one of which includes such facts as relate especially to cancers and tumors; to their characteristics as regards heredity, to the relations existing between benign and foreign growths, to the peculiarities of race and climate, to the endermic influences which foster or retard their growth, or to changes in, near, or distant from, the affected tissue which takes place before the advent of the tumor. The other group consists of those facts which serve to indicate, however obscure, that law which governs the development of all tissues and regulates the relations of any one part of the body to every other. Of the former group clinical evidences come first in order, both from their inherent value and from their precedence in point of time of other facts which are ascertained with more difficulty. The simultaneous appearance of several primary tumors indicates a constitutional tendency to tumors. Every surgeon has met with such cases of multiple primary cancers, multiple lipomas, multiple exostosis and the like. If we accept Virchow's explanation of these cases—that they represent only multiple local force, usually confined to but one kind of tissue—we shall, nevertheless, have a condition which, for all practical purposes, must be considered constitutional. If the connective-tissue swarms with young primary sarcomata, is it not just as essentially constitutional as if they swarmed in the blood? If I do not dwell upon cases of this description it is because the plausible explanation has rendered it possible to reconcile the appearances of multiple primary tumors occurring in one tissue with the theory of local origin. It is otherwise when we find tumors of various kinds occurring in the most varied tissues of the body, and composed of cells of both epiblastic and mesoblastic origin.

THE TREATMENT OF MASTITIS BY REST AND PRESSURE.

By W. F. MILROY, M.D.,

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While house-surgeon to Maternity Hospital, New York City, a year ago, during the service of Dr. Paul F. Mundé, and through his kindness, I had an opportunity of developing an idea which resulted in the adoption of this mode of treatment in all of our cases in which this calamity threatened.

I had never seen anything written upon the subject, and the idea was suggested to my mind by the use of a support for unusually pendulous breasts.

In the main my experience exactly coincides with that of Dr. Harris, as related in his exhaustive paper to which your editorial of May 30th refers. There are, however, several points of difference which appear to me to be of sufficient importance to warrant their presentation.

My method is as follows:

A piece of strong muslin is used, fourteen to sixteen inches in width, and of a length sufficient to reach around the thorax of the patient and overlap a few inches. The patient lies upon her back with the arms elevated so as to clasp the hands above the head, thus drawing the axillæ well upward. One end of the muslin is slipped through beneath the patient, and the two ends made to overlap exactly as in the application of an abdominal binder. A pad of cotton wadding is placed between the breasts to serve as counter-pressure. The breasts are then pressed upward and toward the sternum by an assistant, and the muslin is fastened by pins, which are placed along the middle line about three-fourths of an inch apart. As the pins are put in place, the bandage is drawn tense by about all the force one can comfortably exert through his arms.

When the bandage has been fastened, proceeding in this way from above downward, it will usually be found that its upper part is comparatively loose, and a few pins should be removed and reapplied. The bandage should be brought well up against the axillæ, and thus the upper part of the breast will all be included within it. When it is in place, a small wad of cotton should be tucked in beneath the folds of the axilla above the bandage. This will relieve all feeling of irritation from the bandage in that location. A small hole should then be cut with a scissors over the nipple of the sound side, and the child allowed to nurse this breast. The one principle to be borne in mind in the application of this bandage is to make sure that every part of the breast is included in it, and that the pressure is even throughout. With reasonable care this is easily accomplished. In case the trouble occurs long enough after confinement, so that the patient is out of bed, a strap of muslin may be passed over each shoulder and pinned to the upper edge of the bandage, before and behind. This will overcome any tendency toward slipping down. If the patient is in bed this is wholly unnecessary. The bandage having been once applied need not be removed until the unpleasant symptoms are entirely gone, but may be tightened above and below, as the diminishing size of the breast will permit. After all tenderness is gone, having removed the bandage, the breast appears greatly reduced in size, the integument is relaxed in small wrinkles and folds, and no sign of inflammation is present. There is, however, a uniform induration over the entire organ, it being in a condition somewhat analogous to that of hepatized lung-tissue due to pleuritic effusion. From this it recovers in a few hours if the child be reapplied to the breast, and in a little longer time if the breast be allowed to remain inactive. I would emphasize the necessity for all parts of the breasts being subjected to pressure, for if this be not done, signs of inflammation will very soon appear in the part not compressed.

It will be observed that the most essential point of

difference between this treatment and that of Dr. Harris consists in the employment of *firm* pressure, instead of the slight pressure which he recommends. This I consider a positive advantage. It was a source of great surprise to me to note how much pressure can be brought to bear, with comfort to the patient, in the way I have described. In cases in which the mastitis had progressed so far as to produce an area of bright redness and induration, and so sensitive that the most careful handling produced severe pain, strong pressure made after this fashion gave immediate relief. I have never been able to pin a bandage so tightly as to increase the pain, provided it was evenly applied.

Dr. Harris, in describing his treatment, speaks of an increasing distention of the breast, as a rule, for one, two, or three days after the roller is applied, and says that there is no retrogression, and often an increase in the degree of redness, induration, and tenderness for a day or two; though often improvement begins immediately after its application. In my cases I have, without exception, seen a progressive decrease, from the first application of the bandage, in the distention of the gland and in the redness, tenderness, and induration, in cases in which these were present.

According to my theory of the *modus operandi* of this pressure, in addition to the advantages of rest, another very important element of gain is introduced. In the early part of any inflammation there is a dilatation of the capillaries and small arteries, not only of the inflamed part, but also of all the tissues in its neighborhood. There is also an increase in the rapidity of the blood-current in its flow through these parts, and, as a result of these two factors, the local increase in blood-supply is very great. It is with this early stage of inflammation that we have to do in the prevention of abscess in the mammary gland. Again, the stomach, the intestine, the liver, or any other digestive organ, during the time of its physiological activity, is engorged with blood; and without this increased blood-supply its functional activity is crippled or destroyed. In the same manner, during lactation, the mammary glands normally receive an increased blood-supply, which is provided for during their development in the period of gestation.

Now, owing to the spongy and compressible nature of these glands and the unyielding underlying chest-wall, it is possible so to apply pressure, that, simply by mechanical force, the amount of blood gaining access to them is very much diminished. This being done, we have the danger of inflammation, in an equal ratio, reduced, and that by a twofold action: first, by the actual lessening of the degree of congestion of the part, and, secondly, by diminishing the excessive secretion of milk, which is undoubtedly a potent agent in the production of inflammation. It is true that inflammation itself checks the secretion of milk, but this occurs at a later stage than that at which the bandage will be applied. By the use of such pressure as I have indicated, advantage is taken of this powerful agent in accomplishing the end desired. That it does serve a useful purpose is shown by the fact that recovery begins promptly upon the application of the pressure, so that no further development of the inflammatory symptoms occurs, and also by the rapidity of the cure. Dr. Harris refers to the use of the many-tailed bandage in this affection, as recommended by Dr. L. A. Dugas. I have given the many-tailed bandage no extended trial, but it seems to me impossible to obtain the uniformity of pressure by its use which is essential.

The following objections, suggested by Dr. Harris to the use of the many-tailed bandage, he would evidently apply as well to the bandage that I have described, viz.: "In exerting compression it must flatten the gland and tend to press it out of form. It does not lift the breast—a measure which is always grateful to the patient and beneficial to the inflamed organ. It must exert a greater restraint upon respiration than though the breasts were first lifted and the shoulders included in the bandage."

To the first of these objections I would say, there is no doubt that pressure applied as I have suggested does "flatten the gland," and to a slight degree "press it out of form;" but this I regard of no consequence whatever, since in a very short time after removal of the bandage the gland returns to its normal shape. The breast is effectually lifted and retained in the elevated position, and, therefore, the second objection does not hold.

To the third I answer that I have once or twice heard patients complain of slight discomfort from constriction when the bandage was first applied, but before it had been an hour in place they experienced the discomfort no longer.

Mastitis is a disease so common that every general practitioner must be frequently called upon to treat it. Any mode of treatment, whether of mastitis or any other prevalent disease, in order to come into general use must be of such simplicity and ease of application that the average physician can adapt it successfully to his patient. Now, it must be apparent to any one who reads the description of the application of Dr. Harris' bandage, that its complexity will deter very many from attempting its use, and many more from succeeding in it. Let him who does not think so make trial of it once. Dr. Harris quotes Velpeau, in speaking of this use of the roller bandage, as follows: "The great drawback to its use is the difficulty of applying it in such a manner as to exert equable pressure and at the same time prevent displacement, which movements of the head, trunk, and arms are so apt to bring about."

When a man of Velpeau's genius meets with so much difficulty it is hardly possible that the use of "eighteen large safety-pins," as suggested by Dr. Harris, can obviate the whole difficulty. The extreme simplicity of the bandage, as I have described it, assures its successful application by any one who cares to make the attempt.

I would also call attention to the facility of examination of the breast while this bandage is still in place. Since but a single thickness of muslin covers it palpation shows the exact condition of the breast beneath, and once applied, as I have already stated, it need not be removed until it is no longer needed.

Still another point of advantage of the single piece of muslin over the roller is the absence of the cotton padding which accompanies the use of the latter. The heat of this pad gives more or less discomfort, and, probably, to some extent, delays resolution.

Another point of gain rests in the fact that the patient lies on her back during the application of the bandage I have described. This avoids the exertion and positive danger that attends her sitting up, if the case is one of recent confinement.

For the sake of brevity I will relate but a single one of the thirteen cases of which I have a history. This one I have selected because it was quite aggravated, and also because it showed the result of the old method of treatment, by emptying the breast, as compared with that by rest and pressure.

CASE.—Bridget S——, aged twenty-eight, American, primipara, fairly nourished, was confined June 17, 1884. At the time of confinement both nipples were considerably depressed. The child was put to the breast as usual.

June 21st.—Temperature, 99.6°; pulse, 90; respiration, 18. Both nipples slightly sore. Ordered to carefully dry the nipples and dust them with tannic acid when the child is not nursing.

June 22d.—Condition about the same.

June 23d.—P.M.: Temperature, 101.3°; pulse, 108; respiration, 26. Breasts very full and painful; nipples still sore; head aches; is inclined to worry. Ordered the breasts nursed out and tannin applied to the nipples when the child is not nursing and the breasts supported by a bandage.

June 24th.—9 A.M.: Temperature, 101°; pulse, 108; respiration, 32. Breasts very full, and there is a red, painful, and indurated spot, about two inches in diameter, in the upper part of the left breast, causing great distress. Both nipples are very sore; patient slept but little last night; is much exhausted; anorexia complete. Ordered the breasts thoroughly nursed out and supported. Tannin applied to the nipples during the intervals of nursing.

June 24th.—6 P.M.: Since last seen, two babies, one on each breast, were kept nursing almost constantly until 3 P.M. At this time the breasts still appeared nearly full of milk. The inflamed spot at the upper part of the left breast remained as described. The nipples became extremely sore and the pain from nursing unendurable. At 3 P.M. the nurse began "rubbing out" the breasts and has been thus employed for three hours. It seems impossible to empty the breasts, as they are still well filled. The induration is but slightly diminished. The general condition of the patient rather worse than this morning. Temperature, 101.3°; pulse, 100; respiration, 33. The nipples were thoroughly dusted with tannin and the bandage tightly applied as described, affording instant relief to the pain.

It should be remembered that the Maternity afforded an abundant supply of babies for carrying out the above plan. A rubber nipple-shield was used during nursing from the time the nipples began to be sore.

June 25th.—A.M.: Temperature, 99°; pulse, 80; respiration, 20. Patient rested well during the night and feels much better. The breasts feel comfortable except at the upper part of the left one. In this situation the bandage has become slightly relaxed. The milk has been draining away from both breasts constantly since the application of the bandage.

The bandage was tightened above and below and all pain instantly relieved.

June 25th.—P.M.: The breasts have been comfortable all day but constantly discharging milk. The bandage was drawn a little closer at the upper part.

June 26th.—A.M.: Temperature, 98.4°; pulse, 92; respiration, 18. The patient slept well and is very bright this morning. There is no pain or tenderness in the breasts, and the induration at the site of inflammation is not perceptible. The milk has ceased to drain away from the breasts. The bandage not disturbed.

June 27th.—A.M.: Temperature, 98.5°; pulse, 90; respiration, 18. The breasts are perfectly comfortable. Patient rested well, but is weak and appetite poor. The breast-bandage again tightened.

On the evening of this day (June 27th) the bandage was removed and the breasts found in the condition already described as usual after removal of the bandage. They still contained some milk. The nipples, though still quite sore, were very greatly improved. The breasts were nursed out and the tannin dressing continued to the nipples as before.

It was our custom to transfer all patients, whose convalescence was normal, from the pavilion in which they were retained after confinement to the "convalescent ward," in the main hospital building, on the eighth or ninth day, the transfer being made upon a stretcher.

This patient was not transferred until June 27th, the eleventh day. It almost invariably happened in cases in which there was a hypersecretion of milk that this ceased as soon as this transfer was made. In the present instance, after the transfer was made, the patient had only enough milk for her own child and there was no further trouble with the breasts.

In this case all attempts to empty the breasts by the natural method were fruitless and the condition of the nipples had become simply frightful.

The employment of the "rubbing process" was undertaken with the same result, and in the midst of our very efforts the inflammatory process was developing. The patient was rapidly becoming exhausted, and under old methods of treatment one or more abscesses seemed inevitable. Could any combination of circumstances more satisfactorily demonstrate the efficiency of the treatment I have described?

Your editorial refers to the desirability of further light upon the method of treating sore nipples by bandaging the breast. So far as my experience goes severely excoriated nipples will seldom be met with unaccompanied by trouble with the breasts as well. When allowed to rest, the nipples recover with remarkable rapidity, and it would seem advisable, at least in aggravated cases, to adopt this plan.

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Clinical Department.

A CASE OF MORPHIA POISONING IN A CHILD AGED FIFTY HOURS.

DR. WILLIAM JUDKINS, of Cincinnati, O., reports a case of morphia poisoning in an infant aged *fifty hours*, where by mistake a quarter of a grain of morphia in solution was given. At the time the doctor was summoned, two hours after the first dose was taken (an eighth of a grain in a teaspoonful of water, for supposed colic; the first dose not having the desired effect it was repeated an hour afterward), the child was cyanotic, breathing only three times to the minute, and that very feeble; pulse barely perceptible. Immersions in hot water were at once commenced, and whiskey hypodermatically, in the gastrocnemius. Strong black coffee was also administered per orem and anus. After two hours' constant work, respirations increased in frequency and the heart's action became stronger. Recovery was final, and now, ten weeks after the accident, the child is as well and bright as could be wished. The catheter had to be used several times the first twenty-four hours, and three abscesses were opened that were produced by the frequent introduction of the hypodermic needle. The doctor states he has been unable to find a similar case on record.

Progress of Medical Science.

INHALATIONS OF OXYGEN IN PUERPERAL ECLAMPSIA.—At a recent meeting of the medical section of the Kharkov Society of Experimental Sciences, Professor V. G. Lashkevitch, in the course of a communication on the therapeutic value of oxygen in neuro-pathology, pointed out that oxygen possesses a considerable power of lowering an increased reflex action, and also made the suggestion that oxygen-inhalations may prove of service in cases of puerperal eclampsia. Acting on the suggestion of Professor Lashkevitch, Dr. V. G. Favr, of Kharkov (*Vratch*, No. 13, 1885), resorted to oxygen in two cases, and obtained brilliant results. The first of the cases was that of a seamstress, primipara, aged nineteen, who was brought to the hospital in an unconscious state, with cyanosis, stertorous breathing, and frequent eclamptic seizures, each of the latter being preceded by a uterine contraction. Warm baths, wet packings, and enemata with chloral-hydrate brought no relief; chloroform-inhalations only slightly controlled the intensity of the convulsive paroxysms. In view of the failure of all these means, oxygen was tried. In five minutes from the beginning of the inhalations, the patient asked for water, and then fell into a quiet sleep of two hours' duration, the pulse descending from 120 to 90 per minute; uterine contractions ceased to be a starting-point for convulsive fits. The latter reappeared each time when the inhalations had been stopped, and again gave place to sleep and quiet on resuming the administration of oxygen. The delivery was accomplished with the help of Barnes' dilators, and of puncture of the membranes.

The patient left the hospital on the nineteenth day after the labor, her general health and the state of the kidneys being greatly improved under an appropriate treatment. A second patient, primipara, aged eighteen, was attacked with eclampsia about an hour and a half after the labor. Two severe paroxysms (each of twelve minutes' duration, separated by a free interval of twenty minutes, during which the patient remained unconscious) had occurred before oxygen inhalations could be resorted to. Consciousness returned immediately. Four more paroxysms occurred, but they were considerably milder, and separated by the intervals of absolute comfort; indeed, the patient took her tea and dinner between the eclamptic fits. She made a rapid recovery. Encouraged by his success, Dr. Favr enthusiastically invites all professional brethern to give a trial to so simple a weapon against so formidable a foe, and even goes so far as to ardently hope that in a near future oxygen-gasometers will be found in all lying-in hospitals, side by side with forceps, cranioclast, cephalotribe, and other necessary instruments.—*London Medical Record*, June 15, 1885.

THE SO-CALLED FATTY DIARRHŒA OF DEMME AND BIEDERT.—Dr. Tschernoff has made a large number of analyses of the stools of healthy and diseased infants. The fat in seven healthy children under six months old amounted to from 25 to 30 per cent. of the dried fæces. The average quantity in four dyspeptic children was 48 per cent. Two infants with erysipelas showed respectively 44 and 52 per cent., and the amount remained high long after their recovery. Two cases of catarrhal pneumonia gave 51 per cent. each, and another case 60 per cent. A child with bronchitis and nearly normal temperature showed 39 per cent.; another with chronic diarrhœa 42 per cent. A child nine months old showed during an attack of scarlatina 57 per cent., and after recovery only 32 per cent. The next case was remarkable, for the stools, which were frequent, offensive, and whitish, contained, when dried, no less than 75 per cent. of fatty matter; the child, aged two months, was icteric, with greatly enlarged liver and spleen. A wasted child six months old, nursed by its mother, had diarrhœa, with slimy, blood-stained, offensive stools, which showed 50 per cent. of fat. After treatment, including the substitution of a wet-nurse, the child recovered, and regained all its flesh, but the dried stools still showed 40 per cent. of fat. This case exemplifies the difficulty with which children regain their power of assimilating fat. In the experience of the author, every disturbance of the digestive tract is accompanied by increased fat in the stools, and this increase is greater still if the temperature is raised. Even adults, when feverish, show an increase of 14 per cent. The quantity of fat in the food does not seem to affect the proportion in the stools.—*London Medical Record*, June 15, 1885.

RESORCIN IN MALIGNANT NEW GROWTHS.—In the *Russkaia Meditsina*, No. 6, 1885, Dr. G. J. Gatchkovsky details four cases of cancer-like new growths, in which he, following the instance of Dr. Mannino, applied locally resorcin, either in substance or in the shape of a 50 per cent. vaseline ointment. In two cases of what seemed to be epithelioma of the lower lip, complete cicatrization followed after eight and five weeks' treatment; in one of them there was no return up to the date of the article (thirteen months have elapsed); but in the second case, by the end of two months the cicatricial tissue became exulcerated, and lancinating pain reappeared; the ulcer again healed under resorcin treatment of three weeks' duration. A third patient, a woman aged fifty-six, presented a malignant tumor of the anal margin, as large as a hazel-nut, and diffuse cartilaginous infiltration of the lower part of the rectum. The tumor entirely disappeared after fifteen days' powdering, twice a day, with resorcin; subsequently daily rectal suppositories with twenty grains of resorcin were administered, but unfortunately the patient soon left the town, and thus was lost out of sight. A fourth patient, a woman aged forty-five, was admitted to the hospital about one month before her death, with advanced cancerous destruction of the whole right half of the tongue, and with induration of the submaxillary lymphatic glands. Powdering (twice daily) with resorcin rapidly removed the offensive odor and hæmorrhagic tendency, and also greatly improved the general state of the ulcer. Dr. Gatchkovsky found resorcin in powder of great use, also in cases of acuminated condylomata and fungus umbilici.—*London Medical Record*, June 15, 1885.

THE INFLUENCE OF COCAINE, ATROPINE, AND CAFFEINE ON THE HEART AND BLOOD-VESSELS.—From an experimental paper on the influence of cocaine, atropine, and caffeine on the heart and blood-vessels, by Dr. H. G. Beyer, U. S. N., *The American Journal of the Medical Sciences*, July, 1885, concludes: 1. That *cocaine* is exceedingly prompt and uniform in its effects upon the heart. 2. In small doses it is a powerful stimulant to the heart's action. 3. In medium doses it has an inhibitory influence over the ventricular contractions. 4. In large doses it produces diastolic arrest, from which, however, the heart may be recovered under suitable conditions. 5. In small or large doses it produces contraction of the blood-vessels, independent of the central nervous system. 6. A rise in the blood-pressure consequent upon the administration of cocaine is due to a direct action of the drug on the heart and blood-vessels, stimulating the former and constricting the latter; a fall in blood-pressure coming on after the rise must be accounted for by the action of cocaine on the heart alone, since its constricting influence on the blood-vessels outlasts the stimulating influence it exerts over the ventricle of the heart. That *atropine* in certain doses increases the rate of beat of the heart, and also the amount of work done; that it exercises an inhibitory influence over the contractions of the ventricle; that it first causes a contraction and afterward a dilatation of the blood-vessels; that cocaine acts on atropized vessels in the same way that it does on normal ones, *e. g.*, it causes their contraction. That *caffeine* in small as well as large doses produces dilatation of the blood-vessels in the terrapin; any rise in arterial pressure due to caffeine is, consequently, to be explained only by the stimulating effect caffeine exerts on the heart itself.

THE ETIOLOGY OF ERYSIPELAS.—The now fairly-well-determined fact that erysipelas is a disease due to the invasion of micrococci has not hitherto led to a sufficient explanation of the varieties of the disease, and particularly of the points of difference and of resemblance between traumatic and idiopathic (so-called) erysipelas. In an interesting study of the subject in Virchow's *Archiv*, Dr. Rheimer, after reviewing the evidence as yet adduced concerning the nature of erysipelas, details the results of his examination of two cases of typhoid fever in which this complication occurred. The cases arose in a very severe epidemic which took place in Zurich in the spring of 1884, and he contrasts the microscopical characters of the affected skin, and other tissues obtained from them, with those observed in traumatic erysipelas. In the latter he describes not only masses of minute cocci in the lymphatic spaces and vessels, but also very definite chains of larger cocci and diplococci, apparently the same as those originally described by Recklinghausen, and since by Lukomsky, Koch, Ziegler, and many others. In typhoid erysipelas these last-named micro-organisms were conspicuous by their absence; for although the minuter forms were present in much the same situations and character as in traumatic cases, there were, instead of large micrococci, a number of mostly straight rod-shaped organisms scattered throughout the tissue. These organisms stained badly with reagents, and were apparently identical with the bacilli which Klebs, Eberth, and Gaffky have found more or less constantly in typhoid fever. Although the fact of the existence of a "bacillus typhosus" is still *sub*

judice, and has, indeed, been contested by many, it receives a certain amount of confirmation from this discovery. The latter has, however, a bearing upon the etiology of erysipelas, as indicating that the cutaneous lesion—*i.e.*, the dermatitis—may, indeed, be excited by more than one kind of poison, or, perhaps, to speak more correctly, by more than one kind of micro-parasite. It may be that there is a specific erysipelas organism for the traumatic affection; but it is possible that the spontaneous cases, and especially those which arise as complications of other infective diseases, own a different etiology. The question is a suggestive one, and offers a fertile field for further research.—*Lancet*, June 13, 1885.

Œdema of the Glottis in Tabes Dorsalis.—Any phenomenon may be met with in the course of tabes dorsalis; at least, this statement would seem to be a warrantable conclusion from known facts. We must not lose sight of the circumstance that accidental phenomena also exist and may occur in tabes dorsalis, as in any other disease, without any special significance. M. Huchard read at a recent meeting of the Société Médicale des Hôpitaux a paper on a case of œdema of the glottis following the administration of iodide of potassium in a patient the subject of tabes dorsalis. There was no history of syphilis or alcoholism, and no evidence of Bright's disease. The man was treated on account of the locomotor ataxy with four grammes of iodide of potassium per day. The treatment had to be suspended owing to the induction of iodism. After some days the medicament was given in smaller doses. This renewed treatment was followed by grave attacks of dyspnœa, which threatened suffocation. M. Gougenheim detected œdema of the arytenoid region by laryngoscopic examination. During one of the attacks the "interne" was obliged to perform tracheotomy. The patient ultimately did well. M. Huchard thought that the grave result was largely due to the influence of the iodide of potassium, while admitting that a sensory disturbance in tabes dorsalis may have played a part in the occurrence of the phenomenon. Chemical examination of the iodide of potassium showed that it was impure and contained a certain amount of iodates.—*Lancet.*

The Hygienic and Climatic Treatment of Pulmonary Phthisis.—This year's Croonian Lectures were delivered before the Royal College of Physicians in London by Dr. Hermann Weber. By pulmonary phthisis the author means a chronic disease of the lungs, with consolidation beginning almost always at the apex, having a tendency to caseation, softening, and the formation of cavities, or of fibrous changes; all the changes may occur in the same individual at the same time in different parts of the lungs, or may follow one another at different periods of the disease. These changes are mostly found associated with the tubercle-bacillus, discovered by Koch, and are intimately connected with a state of malnutrition of the whole organism, especially the cells and tissue of the lungs. There is no doubt that the bacillus is intimately connected with phthisis, but the exact relations appear to require further elucidation, as to why it thrives in some persons and not in others; or why it thrives in a person at one time and not at another. It is known that the range of temperature within which the bacillus of tubercle can grow is much more restricted than in the case of some of the other bacilli. Its growth entirely ceases below about 82° F., and above 107° F.; it thrives best at about 98° F. to 100° F. A further point against the spread of the tubercle-bacillus out of the animal body is that it does not form spores in the air. When there is any catarrh of the mucous membrane of the bronchi, and especially of the smaller divisions, and when the expiration is imperfectly performed, the bacillus finds a favorable opportunity for its development. The lecturer then shows that many cases of phthisis are certainly curable; and in the *post-mortem* room many instances are familiar to every one of old phthisical cavities having healed. With reference to treatment, it is impossible to restrict ourselves to that of the developed disease, and to pass over the preventive treatment. In many cases this is the only chance, for, when the disease is once established, in some constitutions it runs a rapid course. The poor have far less hope of recovery than the rich; and, contrary to what is the case in many diseases, existing hospitals cannot put the poor on a par with the rich in the question of the treatment of phthisis. That phthisis is capable of being transmitted from patient to patient is an accepted fact, in the author's mind, and numerous precautions are laid down with reference to the manner in which persons suffering from the disease should behave when living among those either with or without hereditary tendencies. The second lecture commences with the curative treatment of phthisis. This subject is divided under five headings: 1. Diet; 2. Air and ventilation; 3. Exercise; 4. Management of skin, clothing, etc.; 5. Climate. Food should be taken in small quantities and often, and the appetite should be humored as much as possible; milk is the most important article. Fresh air, good ventilation, and healthy exercise without fatigue, are essential. With regard to climate, the most essential feature is the purity of the air from floating matter. A soothing climate is not so good as a tonic one; it should allow the patient to remain in the open air, and at the same time enable him to take exercise and to gain an appetite. The author speaks very strongly on the use of alcohol by phthisical patients, and is convinced that in health alcohol is rarely necessary, but that in phthisis, especially in the febrile stage, it is of the greatest use, as long as the kidneys are sound. The third lecture deals with the effects of climate, and commences with remarks on the beneficial results produced by the dry cold of the Alps in winter on phthisical patients. Altitude climates are recommended in hereditary and acquired tendency to phthisis, but in advanced or complicated cases no benefit is derived from them. After mentioning several health-resorts, the author concludes by remarking that the climate of several places in Great Britain is good for the prevention of the disease, but not for developed cases. The health-resorts on the southern coast lack the necessary arrangements required to render them suitable for consumptives; and Dr. Weber urges the medical profession to use their influence in securing the erection of well-arranged houses with suitable balconies, verandas, covered walks, seats, etc., and with shelters from cold winds, so that those who cannot afford a journey abroad may reap the full benefit derivable from home climate.—*London Medical Record*, June 15, 1885.

Differentiation between Tubercular and Fibroid Phthisis.—Sir Andrew Clark (*British Medical Journal*), speaking of the differentiation between tubercular phthisis and fibroid phthisis, says: "Tubercular phthisis is primarily of constitutional origin, and appears for the most part in the young. It is bilateral. Its course is accompanied by elevation of temperature and rapidity of circulation, by progressive loss of flesh, strength, and color; sometimes by laryngeal ulceration, and sometimes by sensations of painful exhaustion and *malaise*. It is usually rapid in its progress; the majority die within three years, and the few who, in consequence of fibroid complications, live for a longer time, enlarge the average duration of the disease to four or five years. On the other hand, fibroid phthisis is usually of local origin, and appears for the most part in the middle-aged. It is, in the main, unilateral. It is unaccompanied by elevation of temperature or hurry of circulation; flesh, color, and strength may remain but slightly affected for years. It is not incompatible with great bodily and mental energy. The urine always contains a little albumen. The progress of the malady is slow. Œdema is never absent throughout, and death, which seldom occurs within five years, is often delayed for thirty."

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INFANT DIARRHŒA AND THERMIC FEVER.

THE opinion seems to be gaining ground among certain observers that there is some analogy or connection between ordinary heat-stroke and the summer diarrhœa of infancy. It is, of course, the universal experience of physicians practising in large cities that the frequency and mortality of infantile diarrhœa is in direct proportion to the extent and duration of the high temperature. Exactly how the heat acts does not seem so plain. Inasmuch as removal from the city to the country is so frequently followed by improvement and recovery, the bad effects of the heat have been supposed to be chiefly due to fermentative changes produced in food, and to in creasing atmospheric impurity. The heat of the city, however, is very different from the heat of the country, disregarding all other factors, even though the thermometer may register the same in both places. The bricks and paving-stones of the city, in the unshaded glare of the sun, reflect and radiate an oppressive, stifling heat that is shut in by high walls; in the country, however, not only is there a free expanse for any breeze, but the trees and foliage combine to lessen the deadly effects of a prolonged high temperature.

There is reason to believe that several different conditions may be produced by continuous heat. Dr. Guiteras, in the March number of the *Therapeutic Gazette*, describes a thermic fever he has observed at Key West, that is apt to be compounded with typhoid and continuous malarial fever. This form of fever prevails only during the summer, disappearing at once with the advent of cooler weather. Poorly nourished, over-worked persons, living in close houses, are especially liable to be attacked. The writer notes the peculiar predisposition to fever affecting the inhabitants of the tropics from prolonged heat.. While the nervous mechanism that inhibits heat production may not be exactly understood, it is certainly overtasked during the long tropical summers, and as a result fever is a very common symptom. Particularly among children is an elevated temperature present with the slightest indisposition. It is more a prolonged than necessarily excessive heat that appears to produce the thermic fever. The condition of infants living in the badly ventilated tenement-houses of a large city during the long summer months, seems not unlike that of those persons living in the tropics who are most apt to be affected by thermic fever.

It is not difficult to understand how digestive symptoms would assume a prominent place in infants suffering from such fever. Not only is the food upon which they are obliged to live subject to speedy fermentative changes, and impossible to procure very fresh, but heat depresses the nervous mechanism of digestion. The supposition that a sort of thermic fever acts as a main factor in causing indigestion and diarrhœa, instead of the diarrhœa or entero-colitis primarily producing the fever, has some points to commend it. We know that infantile diarrhœas begin to increase in frequency and fatality abruptly with the inception of hot weather, and as quickly stop at its close. Again, of the two hot months of summer in this city, the mean temperature of July is somewhat higher than that of August, and the death-rate from diarrhœal diseases of young children is very much larger in the former month than in the latter, although all other conditions are largely the same. When the weather for a time becomes cooler, the death-rate sensibly diminishes. If the trouble is primarily a thermic fever, the temperature should be elevated before the diarrhœal symptoms manifest themselves. This it is difficult to ascertain accurately, as most cases are brought to the physician for the relief of the diarrhœa. Many drooping, weak babies, without looseness of the bowels, would probably be found to have a fever during a prolonged hot spell if the thermometer were employed.

Instead of falling back on teething or malaria to explain fever in the absence of local symptoms, the direct effect of the heated atmosphere of summer will often afford a more natural explanation. The view that much of the summer complaint is really a form of thermic fever derives its principal interest from emphasizing a point of treatment, namely, the free employment of cooling applications. Dr. Comegys believes such cases should be treated more by the external use of cold water than by giving drugs. As the intestinal irritation is but a secondary condition, it does not require the stress of treatment that should be reserved for the primary factor, the fever. The avidity with which babies having summer complaint will drink water, and the evident relief they experience from cool sponging, are easily explained by the high fever and dry mouth accompanying this condition. Any new idea involving a radical change of treatment should be received very cautiously; but in reference to the summer diarrhœa of infancy, the more common employment of cool sponging will undoubtedly be beneficial.

A NEW FIELD FOR YOUNG DOCTORS.

THE old advice, "Go West," seems to be losing its force as applied to physicians. Western cities are, relatively speaking, crowded with medical men, and if the estimate be true that twenty-five per cent. of those who die under forty die from intemperance, the moral and social status of those who are surviving and practising is not very cheering.

To those who are intending to become doctors we would say at once, in a general way, "'Don't;' unless you see your way to a practice tolerably clearly before you." To those who have cast the die and got their diplomas we suggest the coast of Mexico, the Argentine Republic, and the Congo Free State. We have seen evidence that there are openings in all these places, but we would par-

ticularly call attention just now to the Congo. We have the authority of *The Lancet* for stating that there are openings for medical missionaries there.

Says our contemporary: "They would have the care of the persons employed at the stations and of the dispensary or hospital. There is ample scope for practice, including a large amount of surgery, among the natives, and unlimited opportunities for scientific exploration—botanical, geological, etc. Of course, only gentlemen in hearty sympathy with the missionaries would care for the appointment; but there are probably many young men who would be glad to devote a few years to such a field of practice, and it is impossible to predict what opportunities may open before any who might afterward desire to remain in the new Free Congo State."

Instead of dying of intemperance in the West, let our young doctors become medical missionaries in the East and help to build up a new State, if they can keep off the fever.

INTERMITTENT ALBUMINURIA.

It is only within a comparatively recent period that a condition has been recognized in which there is found albumen in the urine, the presence of which cannot be accounted for by any renal lesion or departure from apparent health. This has, rather inappropriately, been called physiological or normal albuminuria. The etiology of the affection, and the pathological conditions under which it occurs, are as yet unknown, though it would seem to be dependent upon some vaso-motor disturbance. In *La France Médicale* of June 25, 1885, Dr. Merklen reports a case of this sort, which would appear to furnish a slight clue to the nature of the malady. The patient was a youth, sixteen years of age, of ordinarily fair health, but with a family history of rheumatism. He himself was of somewhat lymphatic temperament, with pale face, skin prone to eruptions of acne, and some cyanosis and habitual coldness of the extremities. On two occasions, after a horseback ride, he was seized with a sudden but evanescent dimness of vision. An examination of the urine showed a considerable quantity of albumen. But there being no other signs of nephritis, the urine was examined daily for a week, and it was found that the water passed between noon and midnight was albuminous, while that passed from midnight to noon was free from the slightest trace of albumen. There were no casts at any time. An ophthalmoscopic examination, made by M. Giraud-Tenlon, revealed a slight turgescence of the retinal veins, a sign which the examiner interpreted as indicating vaso-motor atony. There was slight hypermetropia. The temporary visual defect was thought to be due to a sudden suspension of accommodation, occasioned by congestion or a central nervous trouble. Some months later the patient suffered from an acute pulmonary trouble accompanied by a high fever, and during the three weeks that the fever continued, the patient being confined to his bed, the albumen was absent from the urine, but returned again as soon as the patient recovered and began to walk about his room. Its appearance was intermittent as before. In view of these facts, the author was led to surmise that the albuminuria was due to vaso-motor disturbances which were not sufficiently marked to give rise to external manifestations during the period of rest and artificial warmth in bed, but which led to renal congestion, or blood stasis, when the patient was exercising or exposed to cold.

There is another form of intermittent albuminuria which has been noted by Dr. Eichhorst in adolescents, and which, although differing in its symptoms, as well as in its periodicity, from the variety just considered, may nevertheless be mentioned in this connection.

Dr. Eichhorst writes in the *Correspondenzblatt für Schweizer Aerzte*, No. 12, 1885, that he has observed, in individuals at the age of puberty, a peculiar indefinite train of morbid symptoms which did not seem referable to any organic lesion. A chance examination of the urine in one instance revealed the presence of albumen, and being thereby led to examine this fluid methodically, the author found that it was very frequently albuminous. The urine was of a light-yellow color, clear, and only once was a single hyaline cast discovered. The albuminuria was periodical, appearing at intervals of weeks or months, each attack lasting from a day to a week, but seldom longer. The general symptoms were divisible into three groups: 1. Lassitude, debility, weak memory, and mental distraction; 2. capriciousness, irritability, and mental excitement; 3. more rarely there were headache, vomiting, muscular twitchings, and even slight epileptiform seizures. The prognosis was in general favorable, though in some cases the albuminuria recurred at intervals during two years. Internal medication was without effect, and the best results were obtained by a life in the country and by nourishing food.

HOW TO CARRY, UNAIDED, AN INSENSIBLE MAN.

This question is asked by a correspondent in one of our English contemporaries. It is easy to see of what practical use the solution of such a problem would be before actually confronted with it. In battle, at a fire, in many places of danger, an individual becomes insensible, and must be immediately taken from the spot.

The London Fire Brigade teach their firemen how to do this. In a reply to the correspondent, the following description is given:

"A small platform, some forty or fifty feet high, has been erected on the roof of one of the buildings in the drill-yard. One-half of the men who are drilling go up to this platform and prostrate themselves in all kinds of peculiar attitudes, some on their backs, some on their sides, and some curled up. The other half have to go up and fetch them down single-handed. The rescuing fireman first straightens out the seemingly lifeless body of his comrade, and rolls it over onto the face. Then taking hold under each armpit, he raises the body onto his right knee, so that he can put the arm of the insensible man round his own neck. Taking a firm hold, he suddenly straightens himself up, and walks away with his burden in an upright position, and the whole weight of the other's body supported and hooked, as it were, by the arm. He has then to carry his comrade through the window as best he can, and shoot him down the escape."

Several other methods are described for the benefit of the inquiring correspondent. One is to carry the patient "pickapack." Another is to get him in a sitting posture, and for the rescuer to sit back to back with

him, and hook his arms into the patient's arms, and gradually raise himself and his load to the upright position. Still another method is described, that of taking the patient astride the shoulders, the legs having been first strapped together below the knees.

News of the Week.

A DECREE, gazetted Paris, July 8th, requires any person receiving a traveller from Spain to notify the municipality of the fact. Posts of observation are also to be created near Toulouse, Foix, and Perpignan.

FATAL TRICHINOSIS IN BALTIMORE.—Three deaths have occurred in one family from trichinosis following the eating of uncooked ham. They are said to be the first cases of the kind that have been observed in that city.

HENLE'S SUCCESSOR AT GÖTTINGEN has been found in the person of Professor Merkel, of Königsberg.

A PRIZE OF EIGHT HUNDRED DOLLARS has been offered by the Empress Augusta, of Germany, for the best portable hospital or sick-room tent for use in war and during epidemics, and will be awarded in connection with the Antwerp exhibition.

ANTHRAX IN LOUISIANA.—Charbon, or anthrax, prevails to a serious extent in Louisiana. Why not give Pasteur's protective inoculation a trial on American soil?

MEDICAL PROGRESS IN JAPAN.—A new building in Tokio, recently purchased by the Sei-i-Kwai (Society for the Advancement of Medical Science in Japan), for the purposes of a medical library and museum, was opened on March 18th, by the President of the Society, Dr. K. Takaki.

THE MEETING OF THE INTERNATIONAL CONGRESS OF HYDROLOGY AND CLIMATOLOGY, which was to be held at Biarritz on October 1st, has been postponed until the same date in 1886, in consequence of the general elections in France having been fixed for the sixteen days preceding October 14th of this year. It is not intended to make any other change in the programme.

VAN ERMENGEM ON FERRÁN.—Like Brouardel, of Paris, Dr. van Ermengem, of Brussels, is displeased with the results of his inquiry into Ferrán's mode of inoculation for cholera. Van Ermengem questioned and examined about three hundred persons who were inoculated and reinoculated. Not one of the individuals observed showed symptoms in the least suggestive of algidity. Six specimens of blood, taken twelve hours after inoculation, from the top of the first finger, were normal, and contained neither micrococci nor bacteria. In plate-cultivations in nutritive gelatine there was no development of micro-organisms. He did not observe that the slightest precautions were taken to prevent the access of particles from the air to the fluid used for inoculation. The fluid was collected in an unsterilized cup, protected against particles from the air only by an ordinary piece of paper. Even the syringes were only sterilized, as it was called, by having a little boiling water drawn through them. Dr. Ferrán neglects all the precautions that are observed in the laboratory in inoculations *in corpore vili*. The most difficult part of van Ermengem's task of investigation was as follows: He was obliged first to convince himself of the presence of comma bacilli in Ferrán's fluid-cultivations. The bacilli were rather scanty, and there were none of the forms of development that Ferrán pretends to have discovered. He saw that the cultivation-liquid of Ferrán was not very favorable to the development of the cholera-microbes, and that they speedily perished in it. Dr. Ferrán afterward took great trouble to let him see those foreign forms of the development-cycle in older cultivations which he has discovered. He showed van Ermengem, in *bouillon* that was fourteen days old and much changed in appearance, voluminous bodies of mulberry-leaf shape—five, even ten times the size of a blood-corpuscle—which he supposed to originate directly from endogenous spores of the comma bacillus! . . . Other rounded-off, but less voluminous corpuscles, which were found in the same liquid, corresponded, according to Ferrán's view, with free spores that had not developed so much. It is superfluous to say that these things are to be ascribed to impurities of quite a different origin. Van Ermengem was very much surprised to see that Dr. Ferrán is far from utilizing the perfected methods of bacterioscopy for the very delicate morphological investigations with which he is occupied; and everybody will be astonished, as he was, to hear that Ferrán has no object-glass with homogeneous immersion and Abbé's condenser, and that he omits to color the bacteria that he studies. His methods of cultivation, as far as van Ermengem is acquainted with them, are also not above criticism. He placed a series of written questions before Dr. Ferrán, the solution of which seemed to him to be indispensable before proceeding experimentally with the procedure adopted by Ferrán in producing his liquid. To his great regret, Dr. Ferrán declined to answer these questions. He sent word that the moment did not seem to him to have arrived for publishing what he calls his "secret."

LUMBAR NEPHRECTOMY.—Mr. Clement Lucas recently removed, in Guy's Hospital, a distended floating kidney, filled with large calculi, which could be felt through the abdominal parietes. The operation was performed without difficulty through the loin, leaving the peritoneum uninjured. The patient is progressing uninterruptedly toward recovery, her temperature continuing normal, as before the operation.

NEW CLINICAL INSTITUTE AT ST. PETERSBURG.—The Clinical Institute of Princess Helena Pawlowna, which has just been opened at St. Petersburg, is intended by the foundress to serve for instruction of a practical character to students of the University and of the Military Medical Academy in their last year, and to enable qualified men to work out specialties. Dr. E. Eichwaldt has been appointed Director, with charge of the Therapeutical Department. Dr. N. Monastyrski is to have charge of the Surgical Department, and Dr. A. J. Afanasieff has the Professorship of Pathological Anatomy. The Physiologico-Chemical Laboratory is placed under Dr. Pöhl.

A SOCIETY OF GERMAN DENTISTS has been organized in Berlin. Its main object is the suppression of quackery in all that relates to dentistry.

WILL THE INTERNATIONAL MEDICAL CONGRESS MEET IN AMERICA?—Should the arrangements for the meeting be continued under the existing strained circumstances nothing but disaster can ensue. It becomes an immediate question whether steps should not be taken for selecting another place than America as the scene of the next International Congress.—*The Medical Press and Circular*, July 22, 1885.

The most recent advices from the United States have brought the startling intelligence that there exists in the American medical profession a very serious discord concerning the next International Medical Congress. We do not propose to discuss the etiology of this rupture, for it is quite enough to be called upon to face the fact that it exists. The fact is very grave. Its existence jeopardizes, if it have not already destroyed, the probable success of the forthcoming Congress. Certainly our brethren in the States cannot expect those who have already promised to attend, and those who may expect to visit America at that time, to work with enthusiasm in the preparation of any scientific contribution while those whom they propose to visit are divided, and while wholesale secessions of the official executive and of well-known persons nominated to high offices are announced. Nor do we consider it to be either our duty or privilege to suggest a remedy for this exceedingly unpleasant dilemma. It seems to be conclusive that the profession in America at this moment is hopelessly divided on the subject. The outlook, as the matter now stands, is not at all encouraging. One committee has reorganized the work of another up to the point near that of destruction. Moreover, the work of the present committee must be submitted to the American Medical Association in May, 1886; and no one can say to what extent it may also be either overturned or modified in such a way as to seriously impede the labor necessary to be performed before the meeting of the Congress in 1887. Altogether, the position is lamentable, and there is much fear that the acceptance of the invitations to meet in the States may be withdrawn, and the next meeting of the International Medical Congress be held in Berlin or some other great medical centre, pending the settlement of the serious dissensions among our brethren of the United States.—*The British Medical Journal*, July 25, 1885.

Despite the very cheering assurances of the *Journal of the American Medical Association*, that the Ninth International Medical Congress will be conducted in the "most liberal and enlightened manner" by the "present able and judicious Committee of Arrangements," the progress of another week presents a wide-growing distrust of the recent work of the Committee at Chicago. The withdrawal of the appointees of the Committee in Philadelphia, Boston, Baltimore, and Washington has been followed by similar resignations in Cincinnati, St. Louis, Chicago, and in other localities. These declinations have come not only from the gentlemen originally appointed by the first Committee, but, in a number of instances, the appointees of the present Committee respectfully decline to hold the honors awarded them. Indeed, it seems to be quite apparent that the gifts of this Committee will go begging unless some unseen power is raised up to prop its waning fortunes. Under existing circumstances it seems clearly the duty of this Committee to abandon its work of reorganization as the most graceful and practical solution of the difficulties which embarrass it. By such a course the Committee would in no sense lose the respect of the American profession. It has been placed in a false position by the American Medical Association. It has been called upon to perform a duty which no similar Committee of the Association can perform under existing circumstances. The present status of the Congress is the result of a false and unnecessary issue which can work no good to the American profession or to the American Medical Association. Its introduction into this discussion was totally unwarranted and unjustifiable. The "Code issue" is not an issue which should be raised in the organization of an International Medical Congress. At previous meetings of the Congress all questions of medical politics have been rigidly excluded, and such should have been the case in the organization of the present Congress.—*Maryland Medical Journal*, August 1, 1885.

THE CHOLERA IN SPAIN.—The National Board of Health publishes the following figures: Cholera in Spain from March 4, date of reappearance, to July 4, 1885.

PROVINCE.	Cases.	Deaths.	Per cent. of mortality.
Alicante	1,588	646	40.6
Castellon	2,617	1,277	48.8
Cuenca	78	40	51.3
Madrid	1,700	753	59.2
Murcia	6,007	2,319	38.6
Taragona	31	19	61.2
Teruel	12	5	41.6
Toledo	455	207	45.5
Valencia	14,928	6,851	45.5
Zaragoza	628	280	44.7
Totals	28,044	12,347	....

THE COMPOSITION OF KENTUCKIANS.—The last census reports show that the men and women of Kentucky are the tallest in the world, owing, we doubt not, to their good doctors and the blue-grass whiskey, which reminds us of the observation of an acute physiologist, who says that man is composed of one part solids and two parts water, unless he is born in Kentucky.

MR. ERICHSEN'S POLITICAL CANDIDATURE.—Mr. Erichsen is the Liberal candidate for the representation in Parliament of the Universities of Edinburgh and St. Andrews. The *British Medical Journal* says that the presence in Parliament of a certain number of members of the medical profession, accustomed to consider social questions such as those which urgently call for treatment in the next House of Commons, is very generally felt. Mr. Erichsen's return will largely depend upon the efforts of his medical friends and the support of the medical voters generally.

STUDENTS OF THE BERLIN UNIVERSITY.—The number of students matriculated at the Berlin University this term exceeds that hitherto attained in any preceding term. In the summer of 1873 there were only 1,590 students on the books; in 1880, the number amounted to 3,365; and this year it has reached 5,465. Comparing the figures in the Faculty of Medicine, we find 340 inscribed in 1873, 924 last year, and this summer 1,072. There are 11 students from Great Britain, and 89 from America.

SMALL-POX is on the increase in Great Britain.

INDIAN MUNIFICENCE. — Maharani Surnamayi, of Cassim Bazaar, Moorshedabad, one of the millionaires of Bengal, and already well known for her munificent liberality, has given a lakh and a half of rupees toward the scheme for providing separate classes for female medical students at the Calcutta Medical College, and has promised to increase the gift to eight lakhs should a separate college be provided.

THE USE OF CHLOROFORM.—In Dr. Pean's clinic, in Paris, chloroform is given with perfect safety by using an instrument which insures eight per cent. of chloroform to the air breathed. The great danger in administering chloroform is the shutting out of the necessary amount of air.

THE CHOLERA SPREADING.—It is certain now that cholera has appeared again in France, not only on the northern slopes of the Pyrenees but also in the city of Marseilles, where the mortality is from 15 to 20 a day. The daily mortality in Spain is probably not less than 1,500. It will be well for our quarantine authorities to be on their guard against all vessels arriving from Spanish or French ports on the Mediterranean. They should also be well informed about the sanitary condition of Cuban cities. News from Havana shows that while the inhabitants of that city well know that they are in danger very little has been done to prevent the introduction of cholera at that port.

The *Times* correspondent telegraphs from London, under date of August 4th, concerning the cholera in Marseilles, that the local authorities in their efforts at secrecy had decided not to open the Pharo Hospital, but two special emergency wards were fitted up in the Conception. This latter hospital is now crowded with more than twenty patients, mostly serious cases. It being dangerous to keep longer in the same hospital persons sick with other diseases, the Pharo will probably be opened to-day or to-morrow. The cases are far more serious than those of last year. The heat has been prolonged and intolerable, and the sanitary condition of the city is worse than then. There is every reason to expect greater ravages. Opinions differ widely regarding the cause of the outbreak. The common theory, that the disease was brought by Spanish refugees, is not borne out by the facts. Not one of the great host of these has died or been attacked. The doctors generally agree that either the heat developed latent germs from last year or that the disease spread from the troops at Pas de Lanciers, where there are in camp ten thousand men, and whence an average of eighty patients has been daily sent to the military hospital in Marseilles during the past fortnight—ostensibly cases of typhoid fever, but suspected to be really cholera. There is great indignation against the officials for their bungling, harmful attempts at concealment, and among the better classes at the fearful condition of the town. The issue of official bulletins will begin as soon as the Pharo is opened.

A dispatch from Marseilles, dated August 5th, says that M. Legrand, Minister of Commerce, bitterly upbraided the municipal authorities for neglecting to improve the sanitary condition of the city after the warning they received last year. The Pharo Hospital has been opened. Officers who have returned from China say the cholera is raging there, and that Admiral Courbet died from that disease. Thirty persons died of cholera here yesterday. Death follows soon after the victims are attacked. The municipal authorities are inactive and refuse to give any information as to the number of deaths. The cholera panic is increasing. Many persons are fleeing the city in dread. Over four thousand new cases of cholera were reported in Spain on August 4th. Reports from Paris say that the disease has reappeared there.

AN EPIDEMIC IN AN INDIANA VILLAGE.—At Porter Station, a village of some three hundred inhabitants, an epidemic is reported to have broken out. The doctors appear to be unable to ascertain its true nature. The people of the village are mostly Swedes, of cleanly, thrifty habits, and until the present epidemic broke out among them they have been remarkably healthy. As uncontrollable vomiting and diarrhœa are the most prominent symptoms, the disease is probably an endemic of cholera morbus produced by tainted food, and not the mysterious epidemic which it is reported to be.

FERRÁN SNUBBED BY THE PARIS ACADEMY.—The Paris Academy of Medicine has refused to allow a long letter from Dr. Ferrán to be read before the Academy, thus virtually stamping him as an impostor.

THE SIBERIAN PLAGUE.—It is stated that the "Siberian plague" has made its appearance in three different villages within the immedate neighborhood of Odessa. Among Russians cholera has comparatively slight terrors to those aroused by the presence of this disease, which is alike loathsome, fatal, and terribly contagious. The abnormally hot summer, such as has not been experienced during the last six years in the south of Russia, is propagating in an alarming degree many epidemics.

SUFFERING AMONG FRENCH TROOPS IN CHINA.—Reports have reached Paris to the effect that the troops at Tonquin are suffering from "impaludism," and particularly pernicious fever, which latter is committing great ravages among the soldiers. By the last mail the total number of deaths was put down at about 100. Contrary to what has been stated in the political papers, the number of cases of typhoid fever is not greater, all things considered, than in the garrisons of France.]

POISONING FROM ICE-CREAM.—Telegrams from Rome state that two hundred persons have been poisoned through eating the ice-cream sold by an ambulant vendor of Riposti in Sicily, on the occasion of a local holiday.

THE OPIUM TRADE.—The opium treaty between England and China has been formally ratified at the Foreign Office. The chief points in the treaty are the abolition of inland barriers for opium and the adoption of a uniform tax.

THE ILLINOIS STATE BOARD OF HEALTH is now engaged in revising the "Official Register of Physicians and Midwives." Any notification of changes, omissions, or errors will be regarded as a favor, as the Board wishes to make the coming register as correct as possible. Address Secretary State Board of Health, Springfield, Ill.

A FRENCH HOSPITAL IN YOKOHAMA.—A French hospital has recently been founded at Yokohama. It is specially intended for the sick and wounded of Formosa. About a hundred soldiers have already been treated there, exclusively by French physicians.

GERHARDT TO BE FRERICHS' SUCCESSOR AT BERLIN.—It is now definitely settled that Professor Gerhardt, of Würzburg, will succeed to the chair of clinical medicine at the University of Berlin, made vacant by the death of Professor Frerichs. Professor Leyden will also continue in charge of his medical clinic. Both clinics will henceforth be maintained on a basis of complete co-ordination. The former designation of first and second medical clinic is to be dropped.

ONE DOCTOR SUES ANOTHER.—Dr. George P. Bartlett, one of the Board of Pension examining surgeons, of Boston, has brought suit against Dr. E. N. Whittier for $10,000 in an action for libel, and has caused Dr. Whittier's property to be attached. The libel consists of charges against the character of Dr. Bartlett, including statements that he was implicated in the Dr. Azel Ames case, and that he was discharged from the position of medical examiner for the Travellers' Insurance Company, at Woburn, because of being a party to attempts to swindle the company by practising graveyard insurance. Dr. Bartlett has retained General Butler and Mr. Washburne as counsel.

TRAINED NURSES FOR RHEIMS.—A school for the instruction of male and female sick nurses has just been founded at Rheims. The courses of instruction will commence in October.

CHARITY HOSPITAL.—Dr. Charles W. Allen has been appointed a member of the Medical Board of the above institution, vice Dr. H. G. Piffard, resigned.

HOW CAN THE WASHINGTON INTERNATIONAL CONGRESS BE RESCUED FROM FAILURE?

AN OPEN LETTER.

To DR. JOHN V. SHOEMAKER, Secretary of the Committee of the American Medical Association for organizing the Ninth International Medical Congress at Washington in 1887.

DEAR SIR: Having been appointed by the committee of which Dr. Billings was chairman to be the president of the Ophthalmological Section of the International Medical Congress, to be held at Washington in 1887, and having accepted its duties and begun to perform them, I think it becoming that I should report to the committee which has superseded the one from which my commission came, what I have done, and state my views upon the method of conducting the proposed Congress which the American Medical Association adopted at its last meeting in April and May. This method is a signal departure from the original plan, and I must avow that with its conspicuous and essential features I cannot concur, and I think it my duty to declare myself openly both to the committee and to the medical profession.

I attended the Congress at Copenhagen in August, 1884, and entered heartily into the scheme for bringing the next meeting to the United States. In September following I attended the annual meeting of the Ophthalmological Congress at Heidelberg, and at their banquet I publicly urged the members to join us in the Congress at Washington. I also took occasion, in private intercourse, to present this invitation to many ophthalmological colleagues. In December following, while living in Switzerland, I received notice of my appointment as President of the Ophthalmological Section. From that time I officially called attention of medical men to the subject in various cities of Germany and Switzerland, in Paris, and in London. I found a ready and enthusiastic response in favor of coming. I also discussed, with some distinguished men, the topics in ophthalmology which should have special consideration, and some of them agreed to prepare papers on particular subjects to be read at Washington.

The International Medical Congresses, of which the last two were held in Copenhagen and in London, are composed of persons who come together as individuals, not representing societies nor universities, but simply as individuals who have a common interest in scientific and practical medicine. Each Congress is an aggregate of units, *not an assemblage of delegates*. It has power to perpetuate itself, and it recognizes no other organization. The medical men of the city and country where it meets combine together in a suitable organization to prepare for its accommodation, both in reference to its business and to its social entertainment. They unite as organizers and hosts. When the Congress has adjourned and the transactions are issued, their organization is disbanded forever. They do not pretend to any power to decide who shall be members of the Congress, either domestic or foreign. For proof of these statements it is only needful to make inquiry of the leading men of the Congresses in Copenhagen and in London. When, as a private individual, I invited my colleagues at Heidelberg, and when afterward in my official capacity I pressed other medical men in other places, to come to us in 1887, they necessarily assumed that in the United States the Congress would be of the same composition and formed on the same basis as were the previous eight Congresses held in Europe. They had also been told by the committee of invitation at Copenhagen that if they came they would have a national greeting, and be the guests of the whole medical profession of the United States. By its committee the American Association declared that it simply assumed the honor of speaking the words of invitation, which were intended to voice the welcome of the whole profession of the country. At Copenhagen, and among all with whom I have had intercourse on this subject since that meeting, I know that this has been the understanding. In the list of officers chosen by the committee of which Dr. Billings was chairman I recognized this broad and liberal spirit. At the same time, in the rules adopted, the principle of delegate membership was introduced, and made applicable only to American members. This circumstance was pointed out to me by European physicians as something new and strange. This infraction of previous custom has opened the way to mischiefs which have followed. The idea of delegate membership was stringently pressed at the last meeting of the American Medical Association. It was also declared that only members of this Association and of such other bodies as it deemed to be in affiliation with it should participate in the Congress. As a result of this decision the committee of organization was reconstructed, and in carrying out the manifest wishes of the Association, it dropped from the lists of officers the names of certain men. The men thus held up to obloquy were not declared to be unfit because of lack of capacity, or because of deficient scientific attainment. They were simply distasteful to the feelings of a majority of the Association. They had been more or less conspicuous in a recent controversy, whose embers were smothered but not extinguished. The marked distinction conferred upon the medical gentlemen, who by being lopped off have been held up conspicuously to the view of Europe and the United States, may have been meant to be retributive. I trust that the sober second thought of the American

Medical Association will realize that if by putting these gentlemen into their present position any disgrace has been incurred, it certainly does not attach to them.

For my part, I cannot acquiesce in a policy which leads to these results, nor can I do violence to my sense of right by abetting such exclusions. If the intrusion of the delegate idea into the Washington Medical Congress is an unwarranted innovation, and subversive of the previously uniform composition of the International Medical Congresses, we have the strongest reason to rectify our course when we see that the outcome of it has been to cast reflections upon men who are among the brightest lights and best workers in the profession. The baleful influence of this course is beheld in the numerous withdrawals from appointments to office, and from participation in the Congress, which have since taken place.

But it may be thought that enough able men will remain to present a sufficient and capable body of American physicians to welcome our European friends. *Are we likely to have any European guests under existing circumstances?*

Read late numbers of the London medical journals, which naturally are the first to take note of American events. Especially peruse an article from the *London Medical Times and Gazette* of July 17th, which was sent to me by the editor when I left Queenstown on my return home. Its important parts have appeared in the New York MEDICAL RECORD and in the *Philadelphia Medical News* of August 1st. The whole article is reprinted in the *New York Medical Journal*, August 1st, p. 139. It recites the facts to which I have referred; and its comments, pungent and stinging, will not be flattering to our pride. It is entitled, "The Washington Congress in Danger." It points out that the "danger" arises from the maintenance of old controversies and of old ill-feeling. I quote this pregnant sentence: "*We feel sure that a very large majority of English and Continental practitioners will refuse to cross the water if this understanding* (not to raise the Code question) *is not rigidly kept to.*" We know that it is not easy to persuade the medical men of Europe to cross the sea to attend a meeting. Most certainly their reluctance will become refusal, if they are to be landed in the midst of contentions, and are cut off from seeing many of the physicians whom they would expect to meet. They, like all gentlemen, shrink from complicity in broils, however ready they may be to enter into scientific debate. We shall shut out invited guests by closing the doors against our own brethren with whom we differ on matters absolutely irrelevant to the purposes of the Congress.

As an illustration growing out of my own endeavors, let me refer to the ophthalmological section. In the printed schedule of March 24, 1885, I find my name as president (page 21) associated with two eminent men as vice-presidents, and with thirteen other gentlemen as a council, who are not less eminent. They represent all sections of the country except the Southwest, and this omission I pointed out to the committee. The changes made by the present committee (see New York *Medical Journal*, July 4th, p. 19), are as follows: One of the vice-presidents is made president—and I cheerfully accord to Dr. E. Williams, of Cincinnati, the right of precedence, because he is the veteran scientific ophthalmologist of the country—my name comes first among the vice-presidents, and there are two others associated with me, both of them distinguished, viz., Dr. Thomson, appointed by the former committee, and Dr. Holmes, of Chicago, newly appointed.

Instead of thirteen members in the council, the new committee have appointed nineteen, and they omitted to reappoint Drs. Agnew and Knapp, of New York, and Dr. Jones, of Chicago, who were upon the council appointed by Dr. Billings' committee. Can any men among us be found of more distinguished merit than they? All are professors in well-known medical schools. The first two are in the front rank the world over, and Dr. Jones needs no praise from me. Was the reason for the rejection of these men one which the committee would like to publish in Europe? What has since followed is most painfully suggestive. Of the officers in the ophthalmological section appointed by the new committee, the following have to this date, August 1st, declined to serve, viz., the president, Dr. E. Williams, of Cincinnati; the second vice-president, Dr. Thomson, of Philadelphia; the secretary, Dr. Burnet, of Washington; of the conncil, Dr. H. Derby, of Boston; Dr. Norris, of Philadelphia; Dr. Theobald, of Baltimore; Dr. Wadsworth, of Boston; Dr. H. W. Williams, of Boston, and Dr. W. W. Seely, of Cincinnati, have resigned. That is, nine officers have withdrawn, and three who had been officers, were cut off. I declare freely that without these men the ophthalmological section will be robbed of its brightness. But the whole has not been told. The American Ophthalmological Society, at its late meeting, passed the following resolution by a vote of 24 to 12.

"*Resolved*, That it is the sense of the American Ophthalmological Society that the action of the American Medical Association at its late meeting in New Orleans, and of the enlarged committee appointed at that time to make arrangements for the International Medical Congress, in overturning much of the carefully planned work of the original committee appointed at Washington for the same purpose, was unwise and not to be defended, unless, possibly, upon technical grounds; and this Society hopes that none of its members will indorse the action of the enlarged committee by accepting official positions at its hands."

Not intending to assume that there are not many competent ophthalmologists in the country who are not members of this society, it is self-evident that under existing conditions the Washington Congress can have only the ghost of a section of ophthalmology. With the excisions and withdrawals of our ophthalmologists and of other medical men can we still offer inducements powerful enough to bring to us the men we want from Europe? Can I explain to my confrères in Germany, Switzerland, Paris, and London, who expressed their intention of coming and who loaded me with hospitalities—can I account for these withdrawals and exclusions in any way which will not bring disgrace upon our medical profession?

The situation is profoundly critical and failure is certain unless an absolute reversal of the present policy is quickly effected. The delegate idea must be abolished. The pledges given at Copenhagen must be carried out in good faith to the letter. This means that men who have been treated with indignity must be invited back. To do this is not pleasant to human nature, but it is manly, and it is imperative. The Congress must be free to all physicians of honorable standing. Better to have a sprinkling of unworthy men, or of irregulars, than to persist in the mischievous and suicidal course now causing disintegration. Nor can we long delay. To wait until next May is to multiply difficulties and aggravate evils. The officers of the American Medical Association and the new committee should take the responsibility of such measures as will be radical enough to restore confidence, to bring back harmony, and to counteract the distrust which will spread through Europe most rapidly and be counteracted very slowly. I have at present nothing to say about the course which I shall pursue. I have striven sincerely for the success of the Congress and I make this effort also in its behalf.

I remain your obedient servant,

HENRY D. NOYES, M.D.

233 MADISON AVENUE, NEW YORK,
August 1, 1884.

DON'T ROLL MANUSCRIPTS OR PERIODICALS.—This excellent bit of advice is at present being circulated, and the wider it goes the better.

Reports of Societies.

British Medical Association.

FIFTY-THIRD ANNUAL MEETING,

Held at Cardiff, on Tuesday, Wednesday, Thursday, and Friday, July 28, 29, 30, and 31, 1885.

(DIRECT CABLE TO THE MEDICAL RECORD.)

(Continued from page 132.)

THURSDAY, JULY 30TH—THIRD DAY.

AFTER a meeting of the Council at 9.30 A.M., the Third General Meeting was held in the Assembly Hall, and the

ADDRESS ON SURGERY

was delivered by MR. JOHN MARSHALL. The speaker undertook a comparison of the surgery of 1843 with that of 1883, and made especial mention of the methods employed by Mr. Liston at the former period. He said that epithelioma was more common in hospitals now than forty years ago, but he would not have it inferred that this proved an increase in that disease. On the same principle it might be claimed that strictures were more common now, since they were oftener seen by hospital surgeons. He spoke of Liston's skill in operating and the wide range of its application, operating for strabisums, staphyloma, and cataract.

Septic diseases were much more common forty years ago. Accuracy in physical examination was less, there being no laryngoscopes, ophthalmoscopes, thermometers, sphygmographs, etc. Still, the urine was carefully examined for albumen, the breathing, the pulse, and other objective symptoms noted with even more care, perhaps, than now. Though the microscope was but little used, yet cancerous tumors were correctly diagnosticated. Forty years ago very much less attention was paid to the hygiene of the patient, the wards were crowded and ill-ventilated, the closets were not separated from the wards, and the drains not trapped. The diet, also, was much worse. Along with modern improvements the cost of treating the individual patients was increased. The practice of antiseptics, especially, was an expensive one. In the University Hospital this item alone amounted to over $6,000 a year. On the other hand, the stay of patients in hospitals was shortened. Among the striking contrasts between the treatment of 1843 and 1883 was that of simple fractures. These, which used to be leeched violently, are now simply put up in starch-dressings. Inflammatory strictures used to be much leeched. Ulcers of the leg were treated with water-dressings. The use of iodide of potassium for periostitis, so much advocated now, was then just beginning. Many cases of bone caries from syphilis were observed, and some of these cases died. Mr. Liston's particular pride was in his plastic operations. In those days few wounds closed by first intention. Erysipelas and pyæmia followed the best operators. Hygiene was forgotten, and patients were dosed with mercury. Anæsthetics now encourage many more patients to undergo operations than was formerly the case.

At the close of the address Mr. Erichsen moved a vote of thanks, which was adopted.

The reports of the Council on Medical Reform and on Parliamentary Bills were presented.

In the

SECTION ON MEDICINE

papers were read by Dr. F. W. Pavy on "Cyclic Albuminuria (Albuminuria in the Apparently Healthy);" by Dr. E. Markham Skerritt on "Cases Illustrative of Rupture of the Pulmonary Air-vesicles;" by Dr. J. Tatham on "The Registration of Cases as carried out at the Hospital for Chest Diseases and Consumption, Brompton, and the Investigations Proposed to be Specially Worked Out;" by Dr. W. R. Thomas on "A Few Remarks on the Influence of Malaria on the Progress of other Diseases;" by Dr. S. Wilks on "A Case of Simple Stenosis of the Œsophagus, with a Specimen," by Mr. Lockhart Stephens on "A Rare Form of Congenital Heart Disease;" by Dr. C. R. Drysdale on "The Treatment of Syphilis and the Alleged Prevention of Tertiaries," and on "The Hygienic Treatment of Syphilis."

In the

SECTION ON SURGERY

MR. FREDERICK TREVES introduced the subject of

OPERATIVE INTERFERENCE IN INTESTINAL OBSTRUCTION.

The discussion which followed was shared in by Mr. Greig Smith, Alfred Eddowes, A. W. M. Robson, Mr. Pughe, and Dr. Cousins.

Papers were read by Mr. Robson on "A Case of Enterectomy for Acute Intussusception, also a Series of Surgical Cases illustrating the Use of the Eucalyptus-air and Dry Dressings;" also by Mr. E. Stanmore Bishop on "Enterorrhaphy, with a Description of a New Suture;" by Mr. Edward Owen on "Caries of the Cervical Vertebra;" by Mr. H. L. Snow on the "Non-heredity of Cancer;" and by Mr. C. B. Keetley, on the "Radical Cure of Hernia by Injection."

FRIDAY, JULY 31ST—FOURTH DAY.

In the

SECTION ON PUBLIC MEDICINE

an address was delivered by the President, MR. T. J. DYKE, in which he dwelt upon the remarkable progress which sanitary science had made, especially with reference to our knowledge of disease-germs and the methods of destroying them. The thanks of the Section were voted, on motion of Dr. Paine, seconded by Dr. Drysdale.

In the

SECTION ON MEDICINE.

the reading of papers was resumed by Dr. Sidney Coupland on "Gangrene of the Lung;" by Dr. T. D. Griffiths on the "Causes of the Localization of Tubercle in the Apex of the Left Lung;" by Mr. A. J. Harrison on "A New Method of Treating Tinea Tonsurans;" by Dr. Prosser James on "Pancreatic Digestion."

In the

SECTION ON SURGERY

further papers were read, by Mr. Bernard Roth on "Two Hundred Consecutive Cases of Lateral Curvature of the

Spine treated without Mechanical Supports;" by Mr. J. Brindley James, on the "Treatment of Lumbago and Rheumatic Pains by his Special Percuteur;" by Dr. C. B. Ball on "Melanotic Sarcoma of the Rectum;" by Dr. Hugh Miller on "Two Cases of Recurrent Placenta Prævia;" by Mr. T. E. Cahill on "The Latest Surgical Dressings."

In the

SECTION ON OBSTETRICS

the subject of the "Mechanism and Treatment of the Third Stage of Labor" was introduced by DR. BERRY HART and discussed by the members. Papers were then read by Dr. J. Braxton Hicks on "A Condition of the Inner Surface of the Uterus after Delivery of the Child of Practical Importance." Mr. G. Padley reported a case of acute abscess of the unimpregnated ovary, with recovery by absorption; also a case of accidental rupture of an ovarian cyst, with recovery without reaccumulation.

Papers were also read by Dr. Barbour and Mr. Davies.

In the

SECTION ON PUBLIC MEDICINE

DR. S. H. WRIGHT made some remarks on the present management of the Medical Service, and papers were read by Dr. Roberts, Dr. Drysdale, and Mr. James.

In the

SECTION ON THERAPEUTICS

a discussion was held on anæsthesia.

At the last general meeting the reports of the various committees on Collective Investigation, Scientific Grants, and Habitual Drunkards were read.

There were about five hundred members present.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, May 27, 1885.

JOHN A. WYETH, M.D., PRESIDENT, IN THE CHAIR.

(Continued from p. 110.)

POTT'S DISEASE IN A CHILD FIVE YEARS OF AGE, WITH NECROSIS OF ALL THE PRINCIPAL LONG BONES.

DR. WILLIAM PERRY WATSON presented a specimen in which the curvature cervico-dorsal was at nearly a right angle, and yet no symptoms of paralysis. Death from pneumonia.

Gertie S——, aged five years and two months. Her mother was an American and her father a Spaniard. There is no specific history in either. Gertie was bottle-fed. Her first tooth appeared when she was one year old, and her mother says the anterior fontanelle closed about that time. She walked when eight months old. When she was about one year old, a swelling about half the size of an orange appeared on the inner aspect of the lower third of the right thigh. This is said to have entirely disappeared under the use of poultices. From the time she was able to sit up until she was two years old she was accustomed to sit on a counter in a store, by the window, day after day, and look at the passers-by. The lower limbs did not hang over the counter. Her mother thinks the curvature of the spine was produced by this prolonged position, as it was about this time that she first noticed the kyphosis. The mother is quite positive that she never received any injury either from a fall or a blow.

About two years ago she was brought from Syracuse to Jersey City, and came under my observation. At this time the curvature was very marked and could be quite, if not wholly, obliterated by extension and counter-extension. There was also a cold abscess on each wrist-joint, and one on inner aspect of lower third of right thigh. She was walking well and showed no evidences of paralysis. Stillman's backward-traction apparatus was applied, and worn, to her marked relief, for about two months, when a synovitis of the right knee-joint prevented her from walking. In March, 1884, she was admitted to the Daisy ward (for sick children) of Christ Hospital. In June following, she was placed in Meigs' case apparatus, by which she was made more accessible to the fresh air, which, together with cod-liver oil and iron, made a very marked improvement in her general condition. In October following, the right knee-joint with lower third of femur was exsected, as well as the lower third of right radius.

The amount of reparation taking place in six months is shown in this specimen.

In this portion of the vertebral column the absorption of the bodies of the fifth, sixth, and seventh cervical, and first and second dorsal vertebræ is very marked.

The small amount of compression of the cord for so marked a curvature is remarkable.

DR. J. F. RIDLON had in two cases applied traction according to the method proposed by Dr. Brown, that of putting the child in bed and making counter-extension from the pelvis and shoulders by some fixed apparatus attached to the bed, and by weight and pulley when the lesion was high up. In one case the deformity was removed entirely in two weeks. In the other case the treatment was continued two months, when it became necessary to apply Taylor's instrument. He had been very favorably impressed with this method where considerable deformity seemed to be maintained by muscular spasm rather than by disease of the bone.

THE PRESIDENT said that extension in the dorsal decubitus had proved satisfactory in one case under his observation, that of a man twenty years of age, in whom the third, fourth, and fifth cervical vertebræ were involved with partial subluxation. He had paraplegia, which was relieved completely until the patient became restless and uneasy, and the parents removed him from the hospital.

DR. L. H. SAYRE had seen some cases in which the patients had been kept for a long time upon the back without extension, and the deformity had steadily increased. He had seen a number of cases benefited by the same treatment which had been mentioned by Dr. Ridlon and Dr. Wyeth, that is, by extension in the horizontal posture. In small children, where the pelvis is not sufficient to give the required support, he had been in the habit of keeping the patient for some time in a wire cuirass with a jury-mast, and in this way had been able to make traction sufficient to relieve the symptoms and permit of the child being taken out into the open air.

THE PRESIDENT remarked that when he first heard of Meigs' case apparatus he visited him and spent several days in examining it, and was very much pleased with its use, especially where the head was suspended, particularly for high deformities. He thought it was not so well adapted for the lower deformities.

DR. RIDLON asked concerning experience of the surgeons present in the use of chin-pieces—if any had been annoyed by the pieces slipping back and cutting the trachea.

DR. SAYRE remarked that the trouble with chin-pieces, as ordinarily made, was that they did not fit the chin. Often the cup was not sufficiently deep to prevent it from slipping back, and that it was necessary for the chin-piece to be made specially for each patient, and that its fit should be supervised by the surgeon, and not by the instrument-maker.

DR. WATSON also presented a specimen which enabled him to give the history of a case in which there were

THREE SINGLE AND FOUR TWIN PREGNANCIES IN SIX YEARS.

Mrs. C——, English, aged twenty-eight, married six years, a robust healthy woman, was admitted to Christ Hos-

pital on May 21st with bilateral laceration of the cervix. Gave a history of six pregnancies, two children living. In the first she miscarried at the sixth month with twins; in the second she went to full term with one child; in the third she miscarried at the third month with twins; in the fourth she miscarried at the fourth month with twins; in the fifth she went to full term with one child, and in the sixth she miscarried at sixth week with twins. When admitted to the hospital she stated that she had menstruated on March 27th and on May 1st, and normally. On May 21st the right side of cervix was closed with two sutures, and the left with four, after which the sound was passed into the body of the uterus. The case progressed favorably, and on May 25th all the stitches were removed, soon after which there was some hemorrhage which was thought to come from the track of a suture, although both sides were still coaptated. In the evening she had labor pains, and during the night expelled the fœtus shown. Examination to-day, the 27th, shows the right side of cervix closed, while the left side is in about the same condition as previous to the operation. In this pregnancy, making the seventh in six years, she miscarried at sixth week with one. That all these miscarriages were not induced, excepting the last, where there was no reason to expect impregnation, is believed by the medical attendants, and yet their course is not apparent. There is no specific history either in the patient or her husband.

Dr. C. C. Lee said he had been very much interested in what Dr. Watson had stated concerning the patient with unusual fecundity. In a case which exhibited such extraordinary fertility it was almost impossible to avoid such an error, and doubtless many such cases occurred without ever being reported.

Dr. Watson said that the only sign which was even suspicious was the fact that the uterus was deeper than normal after sewing up the cervix and introducing the sound. But there was no evidence whatever of the nature of the case until four days after the operation and the introduction of the uterine sound.

Dr. W. P. Northrup presented a microscopic slide illustrating

INTRAMENINGEAL HEMORRHAGE.

A child, aged forty-four hours, was born in New York Foundling Asylum. Forceps; presentation vertex; labor accomplished after a long, hard pull; suspended animation, recovery; crying, convulsions for twenty-four hours; death.

Autopsy, April 7, 1885.—Body: Eight pounds, no abnormalities. Brain: Meningeal hemorrhage, blood over all circumference except anterior superior portion, most in posterior and middle fossæ; none in ventricles. Hemorrhage about beginning of cord; none in substance of brain. Lungs: Posterior portion of both firm, red, sink in water; anterior lighter in color, softer, aerated; there is found to be hemorrhage into the tissues everywhere—into alveoli, into septa, into connective-tissue about vessels. Kidneys: Hemorrhage into suprarenal bodies, and about right kidney; none into the organ.

The specimen under the microscope shows the hemorrhage into the pia mater. The blood is in the membrane—intrameningeal. The specimen shows the outer layer of the pia mater widely separated, the inner layer lying against the brain substance, the space containing blood.

Running down into the brain is a sulcus in which the pia mater is separated into two layers, and between them is blood. An artificial injection of the lymph-spaces has been well accomplished by rupture of the fine vessels of the membrane itself.

Dr. Northrup also presented a specimen with the following history:

DIPHTHERIA (CROUP)—PNEUMONIA — INTERSTITIAL EMPHYSEMA—CONVULSIONS.

Female, three years five months of age, inmate of New York Foundling Asylum, became croupy ten days before death. On autopsy an exudate of pus and fibrin was found in the larynx. Emphysema (interstitial) in the anterior lip of one lung, and a small mass of pneumonia of posterior portion.

Child had suffered from severe dyspnœa and died in convulsions.

The specimen is an antero-posterior section of the whole lung, showing emphysema and pneumonia. It also shows one of the uses of *celloidin*. The whole half lung, including the root, is one firm mass.

Dr. C. C. Lee remarked, concerning Dr. Northrup's first specimen, that he had no doubt that accidents of this kind occurred very much more frequently in cases where children were delivered with forceps than was usually supposed in the absence of autopsy. He then mentioned a case which he saw in consultation, and in which the head of the child had been dragged directly against the arch of the pubes with the forceps, and in which it was delivered with the use of only a moderate amount of force when the position of the woman was changed so as to correct the inclination of the pelvic contents. The child was resuscitated and its head was carefully examined, and there was no depression or evidence of fracture, but within thirty-six hours, having been quite well up to that time, it gave evidence of clonic convulsions, and died within a few days with symptoms of increasing compression, without the evidence of depression of the cranial bones.

Dr. John F. Ridlon presented a specimen of

THROMBOSIS OF THE LEFT CORONARY ARTERY—INTERSTITIAL MYOCARDITIS — FATTY DEGENERATION WITH DILATATION OF THE HEART,

accompanied by the following history: A man, about fifty-five years of age. General health always good, with the exception of dyspeptic symptoms, from which he had complained for twenty years. It was his custom to dine moderately about six, drinking a pint of light red wine, and take a light lunch with a glass of wine just before bedtime, between eleven and twelve o'clock. Two hours later he would wake up with a fluttering at the pit of the stomach and a peculiar anxious feeling, which would keep him awake two or three hours. Indiscretions in diet and mental worry would aggravate this condition. At times he was free from it. The patient came under my care three years ago. I believed the symptoms to be dyspeptic, but found no result from treatment extended over many months. I several times listened to the heart-sounds but detected nothing abnormal. I last saw him professionally about eighteen months ago, since which, up to his last illness, he was in unusually good health and did not require the advice of a physician. On the morning of April 30th he was in his usual health and went out to visit his pupils. About noon he felt some distress in his stomach, and went into a drug store and took a little bicarbonate of soda in some Vichy. Soon afterward he felt faint, and vomited. He was taken in charge by Dr. A. P. Dudley and taken home. He complained of pain about the pit of the stomach (or heart), and the pulse was very weak. Dr. J. H. Emerson saw him in consultation, but I do not think a diagnosis was arrived at. At about 3 P.M. the pulse stopped, and Dr. Dudley, believing him dead, left him. A few minutes later, however, he revived, and was seen by Dr. C. C. Lee, who gave some brandy by hypodermatic injection. Later Dr. Huntington Richards was called, and him I found on my arrival at 5 P.M. The pulse was very small and weak; the skin was covered with cold perspiration; he tossed about the bed and moaned, holding his hand over the pit of his stomach and heart to locate the pain. A soft, blowing murmur could be heard with the first heart-sound, and was very suggestive of the so-called anæmic murmur. He was given brandy and digitalis hypodermatically, and a blister put over the heart; and he had cracked ice and Vichy. The condition improved, but the pain continuing six drops of Majendie's sol. morph. was given. From

then he no longer complained of the pain and dozed at times. At 7 P.M. there was vomiting, the patient insisting upon going to the stationary basin, being able to walk unaided. At 11 P.M. the heart's action was stronger, the skin drier and warmer, no complaint of pain, and patient sleeping most of the time. At 3 A.M. he asked for and took a cup of beef-tea, but soon vomited it. At 7 A.M. he professed himself much better and got up for a glass of water. At 7.30 he was found dead. The autopsy was made by Dr. Frank Ferguson thirty-two hours later. The body was rigid (it had been on ice) and well nourished. There were a few adhesions between the lungs and the chest-wall. A small mass of tubercle was found at the apex of the left lung. There was some congestion in the posterior portion of both lungs, but little œdema. The heart was very large; it seemed almost large enough to put a normal heart inside of it; there was some roughening of the valves of the left heart, but nothing to cause insufficiency except the dilatation. In the left coronary artery, about an inch and a half down, was found a clot completely plugging the vessel for half an inch; the muscular tissue of the heart beyond this was deeply congested. A certain amount of interstitial myocarditis was found. The stomach seemed very nearly normal but contained about four ounces of blood. The liver, spleen, and kidneys were all enlarged and pale. Dr. Ferguson will report on the microscopic appearances.

MULTIPLE ABDOMINAL TUMOR—FIBRO-CYST OF THE UTERUS.

DR. C. C. LEE presented a specimen which consisted of the uterus and a multiple abdominal tumor. They were removed from a quadroon, married, and twenty-six years of age. When Dr. Lee saw the patient first she stated to him that she had some obscure tumor in the abdomen; that she had consulted several doctors, all of whom said that it was not due to pregnancy, she believing that she was pregnant. The patient was extremely feeble, was naturally a delicate woman, and was in a condition which rendered her very unfavorable for an extensive surgical operation. Dr. Lee diagnosticated an ovarian tumor, although he had never seen a pure ovarian cyst in this race. She entered his service at the Woman's Hospital where he attempted to remove it, and found that the growth involved the uterus, and that he evidently had to deal with a multiple tumor which had begun probably as a fibro-cyst and undergone colloid and partial cystic degeneration. At one point there was evidence of dermoid complication, as there were found a few hairs and slight bony formation. The operation necessitated the removal of the uterus, which was done in the usual manner. Although the patient was very feeble she had not yet had any bad symptoms. To be sure she had not yet passed through the most dangerous period for the development of septicæmia, that is from the sixth to the tenth day, yet there had not been a single trace of evidence looking toward the development of this complication. The specimen illustrated, first, that multiple tumors occurring in the negro race were very apt to be fibroids or fibro-cysts, and, second, that even in a feeble woman it was unjust not to give the patient the benefit of the doubt of a surgical operation.

EXCISION OF THE HIP-JOINT.

DR. L. H. SAYRE presented the remains of the head of the femur, together with the débris taken from the ilium in a case of morbus coxarius, accompanied by the following history:

Florence S——, aged eight years, of Wichita, Kas. Mother has always enjoyed moderate health; father's health poor, several of his family dying of consumption, himself being also somewhat affected, being unable to follow his calling, that of a physician, and compelled to seek other employment.

This little child is the only one the mother has ever borne, and has always been weakly, its birth occurring prematurely between the seventh and eighth months.

She first commenced to complain of her knee when she was not quite three years of age. Previous to this the grandfather had noticed that the child seemed weak in her lower extremities, and advised them to put her in short clothes as soon as possible so that she could move her legs more freely.

This pain in her knee went on during all the summer. The family physician, although afraid of hip disease, confined his treatment to constitutional measures. In October of the same year it became so painful that she could not walk at all. She was then taken to Dr. P——, of Johnsonville, Ill., who pronounced it hip-disease, and treated her in the horizontal posture with extension applied to the right limb by weight and pulley, counter-extension being secured by a bag of shot between the legs, against which the buttocks rested. This treatment was followed out faithfully for five months, at the end of which time she seemed to be perfectly cured. This brings us to the following April. She was up and running around from April until the following October, but as soon as the cold weather set in she again commenced to complain of her knee. She was at once put back to bed again, and remained there until the next February, 1882; and while in this condition the hip (as the mother states) became dislocated.

In March, 1882, the mother took her to St. Louis to see Dr. L——, for the express purpose of having an operation performed. The doctor, however, would not operate, but placed her in bed with extension. She remained there for three weeks. The mother becoming impatient took the child home again.

In July of 1882 an abscess formed at the upper and anterior part of the thigh; Dr. C——, the family physician, treating her in the meantime with extension and general constitutional treatment. In August of the same year the abscess closed up, and she suffered severely from blood-poisoning, which lasted for nearly two weeks, the child not being expected to live.

In January, 1883, the mother took her to the Eureka Springs in Arkansas, her condition then being very low. She remained there seven months, taking electric baths, vapor baths, etc. She seemed to be benefited by this treatment. In the following June she returned home, and had a brace made for her in St. Louis, the mother applying it when it was received. This brace, however, pained her so that she could not wear it for more than a week, when it was thrown on one side. While she was at the Springs two large abscesses appeared at the upper and outer parts of the thigh. Shortly after another abscess formed on the inner side of the thigh, over the adductors, and yet another made its appearance shortly after, making in all five sinuses, and as soon as the child was able to be moved they brought her on to me.

At the time she was brought to me the right thigh was flexed across the upper third of the left thigh, it was impossible to get at the adductors; the knee was also flexed at an angle of almost 45°. Three sinuses were discharging, and the remaining two were temporarily closed; the least movement of the leg caused intense pain; the trochanter major riding high up on the dorsum of the ilium. After a careful examination it was decided that if anything could be done there was nothing left but exsection and subcutaneous division of the adductor muscles. Her health at this time was fair; the mother stated it was better than it had been for years, and was very anxious for an operation, saying she would rather take her back dead, if the operation proved too severe, than return with her in her present terrible condition.

On May 15th I performed exsection of the hip-joint, Drs. Bryant, Van Bibber, Devlin, and Woodbury assisting.

The patient being placed under an anæsthetic, I commenced my incision from a point midway between the trochanter major and anterior iliac spine, passing downward and outward in a curved direction about six inches, extending through the soft tissues down to and through he thickened periosteum of the femur. The head, neck,

and trochanter major and minor were absorbed; the dead bone being plainly visible was pushed up and cut off, with the bone forceps, about two and one-half inches below the trochanter major.

The acetabulum was carious and perforated, a large amount of débris being scraped out from it and also from the ilium, where necrosis extended within three-quarters of an inch of the anterior superior spinous process, and more than half way down the ramus of the pubes; the detritus being scraped out with a Langenbeck's scoop until the entire bony surface was bleeding and clear from dead matter.

The periosteum on the inner side of the ilium was very much thickened, as could be felt through the perforated acetabulum, and which prevented any communication into the pelvic cavity.

The femur being diseased farther down than the first incision, this was extended and an inch more of the shaft removed.

The adductor magnus and longus were divided subcutaneously and some bands of cicatricial tissue broken down, the limb being then brought parallel with the other. The sinuses were thoroughly scraped and all false membrane removed, they and the entire cavity being then thoroughly washed out with a bichloride solution 1 to 1,000. A drainage-tube was passed from the sinus on the anterior part of the thigh down through the perforated acetabulum, making its exit on the posterior part of the thigh below the gluteo-femoral crease, by way of an old sinus. A drainage-tube was also inserted on the inner side of the thigh, emerging from another sinus, the two sinuses on the outer side of the thigh being connected by my incision. The entire wound and sinuses were then thoroughly filled with balsam of Peru, and an oakum tent dipped in the same inserted in the upper portion of the wound down to the acetabulum, the lower edges of the wound being brought together with deep sutures and adhesive straps. A large compress of oakum was placed around the thigh, and firm compression made by means of a roller bandage, after which the child was placed in the wire cuirass and dressed in the ordinary manner. No hemorrhage occurred worthy of mention, and the child recovered well from the anæsthetic with very slight shock. Since date of operation the little patient has progressed favorably, temperature not being over 100°, except on the fourth day, when it reached 103°, due to obstinate constipation, which being relieved the temperature fell to nearly normal.

The Society then went into executive session.

THE AMERICAN OPHTHALMOLOGICAL SOCIETY.

Twenty-first Annual Session, held at the Pequot House, New London, Conn., Wednesday and Thursday, July 15 and 16, 1885.

DR. WILLIAM F. NORRIS, OF PHILADELPHIA, PRESIDENT, IN THE CHAIR.

WEDNESDAY, JULY 15TH—FIRST DAY—MORNING SESSION.

DR. C. R. AGNEW, of New York, read the first paper, entitled

OPERATION FOR REMOVAL OF DISLOCATED CRYSTALLINE LENS.

The operation was described as follows: The pupil was dilated with atropia. The patient was then etherized and cocaine was applied. The eye was secured with fixation forceps. An instrument resembling a two-pronged fork, termed a bident, was introduced into the vitreous chamber behind the dislocated lens, pressing it forward. The bident transfixed the eye and held the lens in position. Section was then made in the ordinary manner and the lens removed. The eye recovered without any unpleasant symptoms. The speaker did not claim that all dislocated lenses should be removed, but this instrument facilitated the operation when it was required.

DR. DAVID WEBSTER, of New York, read a paper (see p. 143) on the

EXTRACTION OF A DISLOCATED LENS BY THE AID OF DR. C. R. AGNEW'S BIDENT.

DR. H. KNAPP thought that in these cases there was not much difficulty in removing the lens, which could often be accomplished with the loss of very little vitreous, but the danger came afterward from inflammatory complications. And where the sight was lost, he thought it better to at once enucleate the eye and thus lessen the dangers of inflammation. He considered the bident which was exhibited to be an ingenious instrument. For the last six or eight years he had not introduced an instrument within the globe to facilitate the removal of the lens. This he was able to accomplish by external manipulation.

DR. C. R. AGNEW, suggested that the bident might also be useful in the removal of foreign bodies from the interior of the eye. He did not acquiesce in the view that enucleation was a simple operation. He regarded it as a serious mutilation.

DR. C. H. WILLIAMS, of Boston, thought that there was another alternative than those mentioned, and that was evisceration of the eye, and closure of the anterior opening with sutures. This he had performed a number of times with success. He thought it better than enucleation. It gives a better stump for the artificial eye.

DR. D. B. ST. JOHN ROOSA, of New York, read a paper, on the

EXTRACTION OF THE LENS IN ITS CAPSULE.

For the past three years the doctor had been in the habit of removing the lens in its capsule, in a large proportion of cases without iridectomy. The use of cocaine had facilitated the operation. He referred particularly to the method of dislocating the lens. The section is made as usual, but large. After puncture and counter-puncture are made, the knife is turned on its back so that it rests on the iris. The knife is then moved up and down two or three times until the lens is seen to move, then the section is completed and the lens can usually be removed with no loss of vitreous. The manipulations on the cornea are made with one or two spoons. Sometimes after the operation the iris is rolled under, but in many cases the pupil is circular. The writer had performed the operation between thirty and forty times, and was satisfied with his success. If the lens is not dislocated, iridectomy may be performed and the ordinary operation practised. A paper on the subject is to be found in the "Transactions of the New York State Society," and in THE MEDICAL RECORD of February 7, 1885.

DR. GEORGE C. HARLAN, of Philadelphia, reported two cases of

SUBCONJUNCTIVAL LUXATION OF THE LENS.

In the first case no operation was recommended, as vision was good. In the second case the lens was removed. The doctor thought it well that in those exceptional cases in which vision remains the operator should think twice before resorting to removal.

DR. O. F. WADSWORTH, of Boston, reported

A CASE OF DISLOCATION OF THE LENS UNDER TENON'S CAPSULE.

The eye had been injured two weeks before the patient came under observation. There was loss of sight, pain about the eye, and irritation of the other eye; the cornea was hazy, and there was blood in the anterior chamber; the eye was enucleated, and it was found that the lens was beneath Tenon's capsule, and that it was held in this position by inflammatory tissue.

Dr. J. A. Andrews, of New York, read a paper on

THE TREATMENT OF PURULENT CONJUNCTIVITIS.

The treatment is based upon the belief that the contagious element is of the micrococcus variety. He related a case in which he had secured an inoculation of the seventh generation of a pure culture of a gonococcus. This is the first case inoculated with the gonococcus. He showed an instrument which he had devised to wash out the conjunctival cul-de-sac. It consisted of an eye speculum, with hollow arms through which fluid may be passed. He had found bichloride of mercury solution (1 to 10,000) serviceable, but apt to irritate. A six per cent. solution of boracic acid was also found efficient. A two per cent. solution of carbolic acid is useful, as it inhibits the movements of the white corpuscles. Irrigation should be maintained for ten minutes in order to remove all secretion. Nitrate of silver solution (two to twelve per cent.) is then used, and an antiseptic dressing is next applied. This consists of vaseline and boracic acid or carbolic acid; but he laid especial stress upon the importance of maintaining irrigation of the conjunctiva by means of the instrument referred to above.

Dr. Charles S. Bull, of New York, read a paper on

ABSCESS OF BOTH FRONTAL SINUSES.

The patient had been hit on the forehead fourteen years previously with a piece of wood. This produced a fracture of both nasal bones and deviation of the septum. In seven weeks the wound had closed. Ten years after the accident a swelling was noted at the upper inner angle of the right orbit which could be made to disappear by pressure. There was complete ptosis. An incision was made into the swelling just beneath the orbital margin, and a large quantity of pus escaped (two or three ounces). The cavity was washed with a five per cent. solution of carbolic acid. No connection with the superior nasal meatus could be detected, but the bony septum between the two frontal sinuses was absorbed, and both sinuses were converted into large cavities. The entire ethmoid bone was an immense cavity, the bony structure being absorbed. A number of osteophytes were removed. A drainage-tube was introduced. The patient was discharged six weeks after the operation and recovered completely. The ptosis disappeared, and the eye was restored to the normal plane.

A case of melanotic sarcoma of the orbit was reported by Dr. Buller, of Montreal, Canada.

Dr. B. E. Fryer, of Kansas City, Mo., reported a case of

BONY TUMOR OF ORBIT.

The patient, a boy six years of age, came under observation April, 1885. There was swelling of left orbit, which included the whole line of the superciliary ridge. It was quite hard. Some time before the boy had been struck by a piece of wood, but it was thought that no splinter had lodged beneath the skin. It was decided to remove the tumor. This was done, and on examination it proved to be a bony cyst within which was a small piece of wood. This was enclosed in bone on all sides. The edges of the wound were brought together, and healing resulted without complication.

Dr. W. H. Carmalt, of New Haven, Conn., reported the case of a child of ten years of age from whom he removed a small growth from the upper lid. Six weeks later the growth had returned. An exploratory operation was done, and it was found that the growth extended into the orbit, and that it was impossible to remove it entirely. It was therefore decided not to complete the operation. The child has since died. The tumor proved to be a rapidly growing sarcoma. He thought that if in young children the tumor appears to be quickly recurrent, and not easily isolated, that no operative interference should be attempted.

Dr. Kipp, of Newark, thought that in many cases these tumors of the orbit are not primary, but secondary, and that the primary tumor may be in such a position as not to attract attention.

Dr. Harlan, of Philadelphia, reported several instances of inflammatory exudations in the orbit simulating tumors, and illustrating the importance of exercising great care in diagnosis.

Dr. W. S. Bennett, of New York, exhibited a series of new test-letters.

Dr. Norris, of Philadelphia, presented a new sheet of metric test-letters, devised by Dr. Oliver, of Philadelphia.

Dr. C. R. Agnew, of New York, made a brief reference to a case of occasional or simulated blindness, in which the vision suddenly returned.

Dr. Theobald described a similar case in which there was sudden blindness. The pupil acted normally, and the ophthalmoscope revealed no disease. A favorable prognosis was given, and the patient recovered in a short time.

Dr. Buller, of Montreal, thought that these cases could not be properly termed entirely imaginary. He thought that there was, for the time being, a functional loss of power in the nerve. He referred to a case in which there was hysterical blindness and deafness, associated with loss of sensation in the skin covering the mastoid region. On one occasion he applied to the anæsthetic surface an iron sufficiently hot to raise a blister. This was done without the patient's knowledge, and unexpectedly. But it did not cause her to wince.

Dr. Roosa had been led to believe from his experience that in these cases there is a basis for the blindness in the ocular condition. There is a derangement of sight from some condition, and the patient finally imagines that she is blind.

Dr. Harlan, of Philadelphia, considered that there were two classes, one in which there is purely deception, perhaps the result of deranged mental condition, and the second in which there is a real temporary suspension of function.

Dr. Risley, of Philadelphia, thought that some of these cases might be explained by an enfeebled condition of the circulation, in which the heart was unable to force the blood against the normal intraocular tension, and the loss of vision thus result from want of nourishment of the retina.

Other cases of hysterical blindness were described by Dr. Williams, of Cincinnati, and Dr. Andrews, of New York.

Dr. E. E. Holt, of Portland, Me., read a paper on

SOME OF THE RESULTS OBTAINED IN THE COMPILATION OF ONE THOUSAND CASES OF REFRACTION.

The writer had been in the habit of recording all the measurements connected with the prescribing of glasses. As a result he had found in one thousand cases thus recorded the average distance between the centres of the pupils of the human eye to be about sixty millimetres. The average of other measurements were given, and the importance of the physician determining and designating them and then seeing that they were carried out was dwelt upon.

A paper on

RAPIDLY PROGRESSIVE MYOPIA CHECKED BY SECTION OF THE EXTERNAL RECTUS,

was read by Dr. G. C. Harlan, of Philadelphia.

The case was that of a boy, aged sixteen, in whom myopia was progressing rapidly. The external rectus was divided seven years ago. The internal rectus was also exercised by the use of prisms. Since then there has been no increase of the myopia.

A paper was read by Dr. Samuel Theobald, of Baltimore, on

THREE CASES OF PROGRESSIVE ASTIGMATISM.

Astigmatism of traumatic origin, the author remarked, is observed not infrequently to undergo changes in de-

gree, but it has been commonly held that congenital astigmatism does not alter in degree though the refraction of the eye as a whole may undergo marked change. The cases which he reported he thought proved that there were some exceptions to this rule. The first case was that of a young man who, with a high grade of hypermetropia, had an astigmatism of each eye which required for correction, a $+\frac{1}{100}$. The case was observed at intervals during a period of twelve years, and during that time the astigmatism increased until finally a $+\frac{1}{13}$ c. was needed to correct it.

The second case was one of compound myopic astigmatism in a young man in which there occurred along with an increase of the myopia a growth of the astigmatism, during a period of sixteen years from $\frac{1}{16}$ to $\frac{1}{8}$.

In the third case a simple myopic astigmatism in a physician aged twety-five years, requiring a $\frac{1}{24}$ c. in one eye and a $\frac{1}{30}$ c. in the other for its correction, changed in five years so that a $\frac{1}{11}$ c. and a $\frac{1}{13}$ c. respectively were needed.

The speaker regretted that the examinations had not all been conducted under a mydriatic, as they would then be more apt to carry conviction to the minds of those disposed to be sceptical regarding the progression of astigmatism. He did not believe that the result would have been different. Such cases are not frequent, but it is important that the fact should be recognized. As the increase of astigmatism is probably due to change in the corneal curvature, the phenomenon should be met with more frequently in the yielding myopic than in the relatively stable hypermetropic eye.

(To be Continued.)

Correspondence.

OUR LONDON LETTER.

(From our Special Correspondent.)

DISCUSSION ON THE PATHOLOGY OF REFLEX OPHTHALMITIS—THE NEW GOVERNMENT AND MEDICAL MATTERS—DISCUSSION AT THE OBSTETRICAL SOCIETY ON THE USE OF ANTISEPTICS IN MIDWIFERY PRACTICE—ARCHITECTS AND SANITATION.

LONDON, July 18, 1885.

AN important discussion on the pathology of reflex ophthalmitis took place at the last meeting of the Ophthalmological Society. The discussion was based upon a paper on the subject read by Mr. Hutchinson, F.R.S, at a previous meeting. Mr. Hutchinson propounded the theory that reflex ophthalmitis had nothing to do with the nervous system. He thought the circulatory fluids rather than the nerves were the means by which the secondary lesions were originated. He suggested that certain elements derived from the original seat of disease were absorbed into the circulation, but that these elements only produced lesions in those tissues which were practically similar to the tissues in which the original lesion existed. He considered it a case of selective affinity. The elements were first given off from the ocular inflammation and circulated in the blood, and then picked out precisely similar tissues in the other eye as the seat of their selective inflammatory action. Mr. Hutchinson aptly remarked that it was an example of emigration in which the emigrant, cast off from home, settled down in a part where there were similar conditions to those he had left. Mr. Hutchinson maintained that such a theory as this would explain the very exact symmetry of reflex ophthalmitis and other related conditions. He said it would hold good, not only for traumatic diseases, but for other forms of acute inflammation, such as pneumonia. Mr. Hutchinson proceeded to develop this theory at some length. In discussing it, he remarked that a similar, though not identical theory, had been put forward in 1880, by Berlin, though he (Mr. Hutchinson) had only become acquainted with it after his own theory had been formed.

Mr. Henry Power opened the discussion on Mr. Hutchinson's paper. He said Mr. Hutchinson's theory presented many difficulties. How could it explain the frequency and rapid character of sympathetic ophthalmitis in young children as compared with adults? also its frequent occurrence after wounds of the ciliary region? How were we also to explain the long intervals which sometimes elapsed before it came on? In many cases, too, the diseased eye caused irritation, but not complete sympathetic ophthalmia. Relapses were also difficult to explain on this theory. Mr. Power's opinion was that some irritation was propagated from the damaged eye to the sympathizing one, either along the vaso-motor, ciliary, or optic nerves.

Mr. Spencer Watson objected to Mr. Hutchinson's theory on the ground that the eyes were the only organs of special sense subject to sympathetic inflammation. He admitted, however, that the appearance of gouty inflammation in joints symmetrically situated favored the theory. Mr. Watson believed that in sympathetic ophthalmitis the inflammation extended by continuity of tissue along the lymph-channels of the optic nerve.

Dr. Noyes, of New York, then spoke. He said we were not yet in a position to controvert any theory, and he was not prepared to support one. The doctrine of propagation by bacilli was well deserving of consideration. We wanted more facts concerning the circumstances under which sympathetic ophthalmitis occurred and did not occur. There were many classes of cases. In some we had to do with mere neurotic irritation, while in others there was genuine inflammatory exudation. Some of the latter sort might be explained on the assumption that the primary inflammation had taken on a septic character. Sometimes the wearing of an artificial eye was followed by the development of sympathetic inflammation which was not a true sympathetic ophthalmitis. He had seen herpes zoster ophthalmaticus followed by sympathetic inflammation of the other eye. Dr. Noyes said he had often seen cases of damage to the ciliary region which were not followed by sympathetic inflammation. He had known penetration of the globe by foreign bodies to be totally harmless. A case was mentioned of nineteen years' standing in which a foreign body in the iris had caused merely local trouble. Cases of foreign bodies in the vitreous were referred to, and also one in which a percussion-cap remained in the lens without causing any changes for some time. The formation of bony shells in damaged and atrophied globes might be followed by neurotic irritation of the other eye. Some cases of partial shrinking of the globe, caused by sympathetic irritation, might be recovered from. A shrunken, sensitive stump might not cause reflex irritation. He thought such cases tended to dispose of the theory of propagation by the ciliary nerves. Again, cicatricial tissue might or might not lead to changes in the other eye. In some cases he had found that mere removal of the cicatrix or other local mischief led to improvement in the sympathizing eye. The facts were so varied, numerous, and contradictory, that he did not know how to make them fit in with any one theory. Dr. Noyes referred in conclusion to the excellent results which sometimes followed the sub-conjunctival or sub-scleral division of the ciliary nerves. His experience during twenty-five years led him to think that indiscriminate enucleation of diseased globes was a practice of doubtful value. Of late years he had not largely recommended enucleation, and believed that he had thereby saved many useful lives.

Dr. Mules said he thought that sympathetic irritation and inflammation, though they had something in common, ought to be separated. He suggested that the former dilated the lymph-spaces, and so allowed infective elements to pass more easily. The length of time which sometimes elapsed might be explained on the bacterial hypothesis. He was not prepared to say that bacterial elements might not arise in the body without a perforating wound.

Dr. Brailey remarked that Dr. Mules's hypothesis was wide and comprehensive. Criticising Mr. Hutchinson's views, he said it was not necessary to advance another hypothesis; it was sufficient to show that that one did not hold good. How were we, he said, to explain on it the fact that secondary sarcoma was so rare in the other eye? In sarcoma of the eye the commonest site for the secondary growth was in the liver. Again, suppurative panophthalmitis was more likely to be followed by purulent meningitis than by a similar suppurative disease of the other eye; so that we had instances in which cancerous or pus cells were taken up into the circulation and caused similar disease in other tissues rather than in the other eye. Dr. Brailey said he did not support any doctrine, but he thought the facts were more explicable on the theory of direct transmission.

Mr. Nettleship said that the theory of blood-infection accounted more easily for some of the phenomena of the disease, viz., the simultaneous appearance of changes, such as neuro-retinitis or iritis, in widely different parts of the eyeball. The difficulties in accepting the theory were, that with it it was hard to understand how the incubatory period could ever be so long as it sometimes was, or why it should break out in the sympathizing eye at a long interval after the removal of the infecting eye. Two other questions might be asked, which would perhaps tell as much against the theory as for it. How could cases be explained in which parts outside the eye underwent organic change in the course of sympathetic inflammation? And how was it that the exciting eye might be but slightly damaged, though the sympathizing eye suffered profoundly? The severity of the inflammation in the latter must depend upon the number of germs it contained; if these were bred in the exciting eye, why did it not suffer in proportion? On the other hand, if they were not simply carried by the blood but multiplied in it, how did the other tissues of the body escape serious change? As regarded the transmission theory, there were difficulties in regard to all the paths along which the disease had been thought to travel. Deutschmann's view that septic inflammation was conducted along the optic nerves met with a certain amount of support from clinical facts. Mr. Nettleship concluded by stating that the chief objection to the theory of transmission along the filaments of the fifth or sympathetic nerves was that the path would be so very long and narrow; the nerve-twigs were so difficult to examine that inflammatory changes in them might escape detection.

In replying, Mr. Hutchinson said he perceived nothing in the arguments which had been brought forward which led him to doubt that his hypothesis might not still be the correct one. It was merely tentative. He said that Mr. Power seemed to hold two theories, one of reflex irritation, and another of direct extension of inflammation. He himself had no doubt of the occurrence of reflex irritation, and the fifth nerve was the agency in this process. According to some, it was dangerous to excise the exciting eye for fear of increasing the irritation; this was not, however, his view. With regard to the length and irregularity of the intervals, and the relapses of sympathetic ophthalmitis, he did not think such facts were more difficult to explain on his than on any other theory. Symmetrical cancer and sarcoma, also, though rare, were not unknown; cases of secondary tumor of the eye had been shown at the Society that evening and at recent meetings. Moreover, the sequence of the development of secondary growths varied exceedingly, and there was a general law to that effect.

The change of government is not without its effects on medical interests. There is now not the slightest chance of the Medical Bill being brought forward, and as the new Parliament will be busied with weightier matters, it may be regarded as practically shelved for some years at least. The Lunacy Acts Amendment Bill has been withdrawn, to the great relief, doubtless, of the owners of private asylums. The Poisons Act introduced by the late government has also been abandoned, but in future the stamps on patent medicines are to be altered so as to remove all appearance of a government guarantee. The new stamps are to bear the words, "This stamp implies no government guarantee." The question of disqualification for medical relief has assumed a new phase. Greatly to the surprise of every one, the new Conservative Government have taken up the matter and have introduced a bill to remove the disqualification. The bill is very similar to that brought forward by an independent Radical member while the late government was in office. I have previously referred to the opinion of the profession on this subject, and will only add that there seems to be some justice in the opinion freely expressed by many, viz., that the introduction of the present measure is simply a bid for the votes of the new electorate.

At a recent meeting of the Obstetrical Society the question of antiseptics in obstetric practice was discussed at some length. The subject was introduced by Dr. Priestley, who gave an account of a visit he had paid to some maternity hospitals at Copenhagen, Helsingfors, and St. Petersburg, and the antiseptic measures used therein. These had resulted in a considerable reduction of mortality. In the ensuing discussion Dr. Matthews Duncan remarked that the subject of antiseptics was the greatest in the obstetric department, but it got very little attention. It was more important than the prevention of epidemics, for they only came occasionally, while puerperal deaths continually occurred. In the history of the subject all measures had failed to reduce mortality till antiseptics were introduced.

Dr. John Williams said that while it was not possible to abolish by antiseptics the effects of pregnancy and labor, we might hope to do away with deaths from puerperal fever. Taking the deaths in childbed at one per cent., the lowest mortality after the destruction of puerperal fever would be a quarter per cent. The object should be to reduce the mortality to this level, and he believed it might be attained by antiseptics. This was the object of Dr. Champneys and himself at the General Lying-in Hospital, but it had not been attained. They had used in succession carbolic acid, permanganate of potash, and corrosive sublimate as antiseptic agents. The last had been in use since May, 1884. Since it had been employed there had been no deaths from puerperal fever and scarcely any morbility. Dr. Champneys said the total mortality at the hospital during the last four years and a half was 0.66 per cent. The last two deaths were from phthisis, with which the patients were practically moribund on admission. Dr. Playfair, Dr. Braxton Hicks, Dr. Harvey, of Calcutta, and others also spoke.

All the speakers agreed that the use of antiseptics was of great value in obstetric practice. Several of the speakers referred to the paramount importance of antiseptic cleanliness of the hands, including the nails, and this as much on the part of the nurses as on the part of the medical men.

At the anniversary dinner of The Sanitary Institute of Great Britain a rather sharp passage of arms took place between the Right Hon. G. Sclater-Boothe and Mr. Ewan Christian, President of the Institute of British Architects. The former roundly accused architects of gross ignorance in sanitary matters, and maintained that the medical profession had been the pioneers in sanitary reform. The latter defended the architects and laid the blame on the Metropolitan Board of Works, who had, he said, allowed whole estates around London to be covered with houses which were "mere rubbish," and a disgrace to the metropolis. He said the Board of Works ought to acquire new Parliamentary powers to check this building of unsanitary districts and to provide a proper proportion of open spaces, after the example of Chicago, which had reserved seven parks and thirty miles of boulevards.

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Original Articles.

THE OPERATIVE TREATMENT OF INTESTINAL OBSTRUCTION.[1]

BY FREDERICK TREVES, F.R.C.S.,

HUNTERIAN PROFESSOR AT THE ROYAL COLLEGE OF SURGEONS OF ENGLAND; SURGEON TO, AND LECTURER ON ANATOMY AT, THE LONDON HOSPITAL.

IN the history of the science of surgery it is not difficult to find instances where the progress of surgical therapeutics has been hampered by a nomenclature; and were such instances not forthcoming the present subject would, at least, afford an excellent example. By conventional usage intestinal obstruction is spoken of as if it were a clearly differentiated ailment, possessed of unvarying characters and a precise individuality. It is in reality a generic term, and one that embraces many conditions. At the most, it expresses a prevailing feature common to many different anatomical states. It is the product of clinical and not of pathological knowledge. It is the surviving relic of the old term "ileus," a term that was applied to a certain combination of symptoms at a time when the anatomical basis of those symptoms was without form and void. It is now known that the "ileus" of the ancients may depend upon a great variety of anatomical causes, separated from one another in many instances by the most diverse characters. Operative surgery obviously can concern itself solely with anatomical data. A symptom is beyond the reach of the surgeon's knife. I venture to think, therefore, that any discussion as to the operative treatment of intestinal obstruction must be founded upon our pathological knowledge of the disease, and must start from that standpoint. "Intestinal obstruction" is hardly a translatable term. It has different meanings to different minds. It is impossible to discuss under one heading the treatment of a collection of symptoms that, although alike, may depend upon such different conditions as a fibrous structure of the bowel on the one hand, and an impacted calculus on the other. It would be as reasonable to consider retention of urine as a distinct and isolated malady without recognizing that it may depend upon a stricture of the urethra in one case and an impacted calculus in another.

The operative treatment of intestinal obstruction is most conveniently considered under three heads. 1, The treatment of acute obstruction; 2, the treatment of chronic obstruction; and 3, the treatment of chronic cases that have become acute. Time will not permit a full consideration of the subject, and I think it would be better, therefore, in the present instance to deal solely with one phase of the affection, and to limit the discussion to the acute form, since it presents the most urgent claims to the surgeon's attention.

Acute Obstruction.—The fairly defined collection of symptoms that make up the condition clinically known as acute obstruction may, for our present purpose, be ascribed to three anatomical conditions: 1, To the hernia-like strangulation of the bowel; 2, to volvulus of the sigmoid flexture; and 3, to acute invagination.

1. Under the former heading many structural causes of obstruction may be placed. The following are the most common: Strangulation by peritoneal bands of all kinds, strangulation by omental ligaments or cords, strangulation by Meckel's diverticulum or by an adherent appendix or Fallopian tube, and lastly, strangulation through slits and apertures. With the last-named would be included internal herniæ. In their precise anatomy these various forms may be, and indeed are, often very unlike one another. The lack of resemblance, however, is no more pronounced than is the difference between an adherent appendix and an adherent diverticulum, or between these structures and a cord-like adhesion or an omental band. In every instance a knuckle or loop of bowel is held and kept in bondage until it is strangulated. The mechanism of the obstruction is in all main points identical with that of strangulated external hernia, the general pathology is the same, and, with some minor modifications, the symptoms are the same. For these reasons I have ventured to class all these forms of occlusion under the one heading of "hernia-like strangulation of the bowel." I do not know by what means the condition of the intestine in these cases could be distinguished from that met with in strangulated hernia, and it is also well to note that the segment of the intestinal canal that is usually involved in rupture is identical with that that is most frequently implicated in the internal form of occlusion. The varieties of intestinal obstruction that are classed under the above general heading are comparatively common, and, indeed, they form together no less than one-fourth of all known varieties of intestinal occlusion, both acute and chronic.

The *treatment* I would venture to propose is the following: The patient should be placed in bed and kept absolutely at rest. Some relief to the abdominal pain may be given by warm applications to the belly. The primary object in the general management of the patient should be to secure complete physiological rest to the alimentary canal. Physiological activity means increased peristalsis; increased pain, vomiting, and collapse; increased engorgement of the bowel, and an aggravation of the condition of the damaged part. No food of any kind should be administered. The dryness of the mouth and the intense thirst may be relieved by sucking ice, or in instances where this is not well borne, by sipping hot tea. Perfect rest may be brought to the disturbed intestine by means of opium. Some surgeons prefer belladonna, but it appears to me that a hypodermatic injection of morphia acts with greater readiness and certainty, and brings about a more complete paralysis of the gut.

It must be borne in mind, however, that by the use of opium the symptoms are masked, and the administration of that drug should be directed cautiously before the diagnosis has been established. It is as well to have the colon emptied, when occupied by fæces, by means of an enema, and, when once the bowel is stilled by opium, thirst may be relieved by copious enemata of lukewarm water without producing increased intestinal disturbance. So far for the preliminary routine treatment. The next step should be an attempt at the relief of the obstruction by laparotomy.

I would venture to urge that laparotomy should be performed, when possible, within the first twenty-four hours; provided, of course, that the diagnosis is in its main point clear. The arguments that may be urged in favor of an early interference are these: The course of the malady is rapid. Its average duration is six days. Its termination is fatal. The final issue appears to depend not so much upon the age and state of the patient, or the immediate cause of the obstruction, as upon the amount of bowel involved and the rigor of the strangula-

[1] Read before the British Medical Association, Cardiff, Wales, July, 1885.

tion. It is to the speedy relief of the dying intestine that all the surgeon's attention should be directed. With regard to the question of spontaneous cure, it is certainly not impossible; but I have been unable to find any recorded case or any museum specimen that affords an instance of it. Patients who have died of acute obstruction of the kind now under discussion have had previous attacks of acute occlusion in no way differing, except in duration and mode of ending, from the final fatal attack. It would be fair to assume—and it is only an assumption—that the previous attacks were of the same pathological character as the final one, but that they ended in spontaneous cure. Certain specimens also point to the possibility of relief by means of gangrene of the obstructing band or diverticulum, and also by the formation of a protected perforation with the subsequent development of an artificial anus. It must be evident, however, that these meagre data form no excuse for delay. Laparotomy is in itself not a serious undertaking. Its high mortality in the present class of cases depends, I venture to believe, upon the fact that the operation is usually undertaken too late. It is regarded as a last resource, whereas it should be the first resource, since it is the only resource. When once the diagnosis of a strangulated hernia has been established, and taxis has failed, no surgeon, I imagine, is disposed to temporize. The condition of the bowel in these cases is identical with that found in strangulated rupture, and the therapeutic principles that apply to the one should apply to the other. It seems to be tampering with life to waste time over the administration of metallic mercury and enemata of tobacco and the like. To thrust an aspirator into the abdomen, as some advise, is a stab in the dark, an empirical proceeding that leaves everything to chance. Massage or abdominal taxis has its advocates, but the procedure is at the best a blind one. The manipulation of the abdomen may, by a rare combination of circumstances, reduce a snared loop, but it is as likely to aggravate its condition and to produce a perforation in a segment of intestine that is approaching gangrene and that needs the tenderest handling. Even if the diagnosis be ill founded, the laparotomy merely resolves itself into an exploratory incision. Such incision adds but a fractional part to the sum-total of the risk to life involved; it displays a course of action, and even if it be found to be of no avail it is questionable whether in many cases it hastens the inevitable ending. The use of laparotomy in other than acute intestinal diseases for purely diagnostic purposes has been clearly established, and has been accredited a position of considerable and undoubted value.

With regard to the technique of the operation, I take it that the incision should be made in the linea alba, below the umbilicus; that it should be large enough to admit the entire hand at once, and that it should be made under antiseptic precautions. With regard to the latter point, it does appear to me—speaking only from my own experience—that much of the success of these operations depends upon the observance of the strictest Listerian methods, including the use of spray throughout the whole of the operation. It is well also that the incision should be a clean cut, and that the use of that uncouth weapon, the steel director, should be discarded. When the abdomen has been opened, the carbolized hand should be cautiously introduced, any protrusion of intestine being prevented by means of a flat warm sponge. The hand should be directed toward the cæcum; and if that part of the colon be found empty and flaccid, it may be assumed that the obstruction is in the small intestine. It is well next to search for the seat of trouble in the right iliac region, about which it is most commonly placed. If the affected loop be not readily discovered, I would strongly advocate Mr. Halke's plan of feeling for the collapsed coils below the obstruction. These coils are most commonly hanging in the pelvis, and by passing them through the fingers the constriction may be reached without much loss of time. It is needless to point out the difficulty of finding the point required by simply passing the small intestine in review inch by inch. Such a procedure is as likely to direct the surgeon's fingers to the pylorus as to the obstructed loop. The method also of straightening the mesentery, so as to make out its right and left side, is of much value in preventing the error just named. I think that the practice of allowing the intestinal loops to protrude, and of then examining them in detail, is open to serious objections, apart from the fact of its being quite unnecessary. The procedure is, however, advocated by some surgeons of considerable note. I am in the habit, as soon as the abdomen is opened, of placing a large, warm, carbolized sponge deep in the pelvic cavity. It is removed just before the operation is completed, and its use certainly economizes time, and saves much manipulation of the pelvic viscera and intestines by sponging. Should the bowels protrude and any difficulty exist in their proper reduction, I would point out that the puncture of the engorged intestines above the obstruction, for the purpose of relieving distention, is by no means either a simple, or a harmless, or even a useful addition to the operation. The closure of these punctures in instances where the bowel is much distended, paralyzed, and hyperæmic is, I venture to think, often not so certain as is sometimes supposed. When the obstruction has been found, small bands may be torn across, while larger ones may be divided between two catgut ligatures. An appendix or a diverticulum should be excised close to its base, and the opening so made closed by Lembert's suture in such a manner as to bring the serous surfaces in contact. Any persisting slit or aperture may be closed by a few points of catgut, so as to prevent any further trouble at the same spot. The involved bowel, if in good condition—that is to say, if still of good color, smooth surface, elastic, and resisting—may be returned free into the abdomen; but if it have lost its elasticity, be of dull surface, or visibly gangrenous, I am of opinion that it should be resected and an artificial anus established. I think that in these cases the immediate suture of the divided bowel after the resection is to be condemned, and that all the recorded cases, so far as at present known, are in favor of the establishment of a temporary artificial anus. In the first place, the suturing of the bowel after the excision would greatly prolong the operation, and the condition of the patients upon whom these operations are performed is usually not such as would encourage prolonged narcosis. In the second place, it is the obstruction to the bowel that clamors for relief, and not the mere circumstance that a segment of intestine is gangrenous. It must be remembered that the bowel above the obstruction is greatly distended, and if the intestine be sutured and returned, that distention will remain but imperfectly relieved. The bowel at the suture line will be entirely paralyzed, and will itself form a cause for an abiding obstruction. In the third place, it is difficult to precisely define the limits of the gangrenous action; and even if those limits are widely trespassed in the resection operation, there is still the circumstance that the state of the bowel above the occlusion is exceedingly unfavorable for the kind of healing process that the operation demands. Lastly, there is the mechanical difficulty of uniting the large and distended tube of bowel above the constriction with the shrunken and collapsed segment that exists below it. On these grounds, I think, therefore, that strong claims may be founded in favor of a delayed union of the parts separated by the excision.

The abdominal wound is closed in the usual way, and unless any peritonitis exists, I take it that no drainage-tube is required. If, however, peritonitis should have been established, and especially if it has led to much effusion, I would suggest that the whole abdominal cavity should be freely washed out with a weak carbolized solution, at a temperature of 98°, and that the peritoneal sac should be drained.

One point remains, and it is not perhaps a very important one. It is usual, with many surgeons at least, to have the abdomen supported, for a considerable period after any operation involving an opening of the belly, by a broad bandage or binder. The object, I take it, of this support is to prevent any yielding of the parietes at the seat of the wound, and to protect the patient from the possibility of some degree of ventral rupture. In stout women with pendulous abdomens this practice may be of value, but in patients of ordinary build its adoption appears to me to be a little against reason. If the abdominal parietes yield when the patient has left her bed and is up and about, such condition may fairly be ascribed to structural weakness of those parietes. It may also not be unfair to assume that if the abdominal walls were to become strengthened, such protrusion would not occur. Now I take it that a musculo-aponeurotic structure like the anterior abdominal wall is only to be strengthened by exercise; and the use of the bandage not only greatly limits such exercise, but causes the responsibility of supporting the viscera to be thrown upon the fabric, and not upon the abdominal muscles. No man would endeavor to strengthen a weakened arm by holding it in a sling. I have been in the habit, in all cases in which I have opened the abdomen, for any cause, of keeping the patient in the recumbent position for—on the average—three weeks, and then of allowing her to move about without any kind of artificial support to the abdomen. So far I have never seen anything but a dense, firm cicatrix as a result of this practice.

With regard to the prognosis that has been given, as pertaining to the present form of obstruction, it must be noted that certain cases have been recorded where symptoms of an acute character existed, and where a recovery followed after a non-operative mode of treatment. Some of these cases may be examples of spontaneous cure. It would, perhaps, be not unfair to surmise that others may have been the subjects of an imperfect diagnosis, while the remainder may have belonged to certain rare forms of acute strangulation that can hardly be clinically distinguished from the hernia-like obstruction just dealt with. Among these forms may be named strangulation *over* a band, acute kinking of the small intestine, some cases of volvulus of the lesser bowel, and of occlusion by the pressure of an external tumor, or by a foreign substance inside the intestine. These forms are all quite rare, but may all be the subject of spontaneous relief. It will perhaps be allowed, however, that a laparotomy in such cases would not be a serious complication, and would render recovery somewhat more definite and certain.

2. Acute volvulus of the sigmoid flexure. Volvulus of any part of the intestinal canal other than the sigmoid flexure being comparatively rare, and chronic volvulus being still more uncommon, it will be convenient under the heading of volvulus to limit all observations to the acute twisting of the sigmoid flexure. This species of volvulus forms one-fortieth part of all varieties of intestinal obstruction. Its diagnosis is not obscure, and there is indeed little difficulty in differentiating it from all other forms of acute occlusion save that due to the kinking of the loaded sigmoid flexure above some stricture at the commencement of the rectum. So far as I can ascertain, there would appear to be no prospect of spontaneous recovery in these cases when once the twist has become complete. The average duration of life in twenty cases that I collected was six days, and the usual cause of death would appear to be from peritonitis, which is apt to set in somewhat early in the case.

I have pointed out in my Hunterian lectures, at the Royal College of Surgeons, that the arrangement of the normal sigmoid flexure is liable to considerable variation. The condition of the gut that is necessary for the production of a volvulus is the following: The loop must be of considerable length, the meso-colon must be long and narrow, and the two extremities of the sigmoid or omega loop must be brought as close together as possible. It is about this neck of the loop that the twist takes place, and the prognosis does not seem to be affected by the particular direction of the volvulus. The anatomical condition just named may be congenital, or it may be brought about by some contracting peritonitis involving the sigmoid meso-colon, although without doubt the commonest cause of the peculiar arrangement of the loop is chronic constipation. It may be necessary to point out that volvulus is much more frequently met with in males than in females, and that the bulk of the cases fall between the ages of forty and sixty.

The treatment of volvulus of the sigmoid flexure involves many points of serious difficulty. I take it that in the first instance the treatment by rest and starvation would be insisted on as a matter of routine; opium would be administered, and it may be as well to empty the rectum by an enema. With regard to more active interference I believe that all attempts at relief by means of enemata or rectal tubes are likely to prove not only quite useless, but actually harmful. If the precise relation of the parts be borne in mind it will be perceived that a forcible injection into the rectum will tend to tighten rather than to relax the twist. In one subject, who had died of an unrelieved volvulus I found that when the twist had been nearly reduced on the post-mortem table it could be made to reappear by injecting water into the rectum.

Simple laparotomy, it must be confessed, is not a very promising procedure in these cases. In the first place, the distended coil often reaches to the ribs, or even to the diaphragm, and by no ordinary incision could the great loop be dealt with. Through such an incision, however, a volvulus may be reduced with success, as shown by a case reported by Mr. H. Clark (*Lancet*, 1883). If the abdomen be opened, I would suggest that the gut be reduced in size by a puncture with a capillary trocar, and then that attempts be made to replace the distorted flexure. This procedure may succeed, and it is possible that the surgeon may convince himself that the probability of a return of the volvulus would not be very considerable. In actual practice, however, I anticipate that the trocar will not sufficiently empty the loop to render it easy to be handled, and that after the reduction the operator will have reason to believe that if no further steps are taken a return of the twist will be exceedingly probable.

In any future case, therefore, that may come under my notice, I intend to adopt the following operation: To perform a laparotomy in the middle line, to puncture the gut and attempt its reduction. If this fail, or the result appears unsatisfactory to evacuate the involved gut through an opening in the summit of the flexure, to unfold the volvulus, and establish an artificial anus, using the opening just alluded to for that purpose. By this method the volvulus could be relieved in a very short space of time and without much handling, and the distended colon above the twist could empty itself through the artificial anus. Inasmuch as this artificial opening would be at the summit of the sigmoid flexure, a return of the volvulus would be impossible. The flexure would be permanently retained in good position by means of the adhesions that would form about the fecal fistula. In process of time the artificial anus would be closed by one or other of the operations adopted for that purpose. It may be unnecessary to point out that there is no anatomical difficulty in establishing an artificial anus leading to the sigmoid flexure through the middle line of the abdomen. The operation just alluded to is little more than a simple colotomy, since the manipulation of the bowel antecedent to the opening of the colon need not be prolonged. One thing is certain, that these cases of acute obstruction demand very prompt treatment. The rapidity with which peritonitis sets in in the present form of occlusion is very striking, and there is, moreover, great risk of the involved loop passing into a state of gangrene. A left lumbar colotomy in these

examples of volvulus would certainly relieve the obstruction, but it would probably effect no change in the volvulus, and there would be great likelihood that the artificial anus established would have to be a permanent one.

3. Acute intussusception. The chief point of interest in connection with this form of obstruction is concerned in the question of the frequency of spontaneous relief, and the matter that presents itself most prominently to the surgeon's notice relates to the reliance that is to be placed upon the prospect of such relief. This form of obstruction is quite common, and forms, indeed, no less than one-third of all known varieties of the affection, excluding hernia and obstructions due to congenital defects. The acute cases are defined as those that—if they follow an uninterrupted course—end in death within seven days. These cases form about fifty per cent. of the whole number of invagination cases. It is well, also, to bear in mind that the enteric and ileo-colic forms are not usually acute, and that fifty per cent. of all the examples of the disease are met with in patients under ten years of age. Spontaneous cure may be met with under two circumstances. In the first place, the invagination may reduce itself before the period has been reached when from structural changes it has become irreducible; and secondly, spontaneous cure may occur after the invagination has become irreducible, either by the formation of fecal fistula above the obstruction—a form of relief that is very rare—or by the elimination of the gangrenous intussusception.

The method of relief named in the first category is certainly not infrequent. Most surgeons must have met with instances of acute invagination that have become cured without elimination of the intussusception, and with no more elaborate treatment than that comprised by rest, starvation, and the use of opium or belladonna. It is to be regretted that statistics are not forthcoming to show with what frequency this termination of the case may be expected. To enter at once into the treatment of acute invagination, I imagine that general approval will sanction the immediate use of opium or belladonna, together with practical starvation and perfect rest.

By these measures the peristaltic movements are stilled, the irregular muscular action in the bowel that has provoked the malady is arrested, and the prospect of spontaneous reduction is greatly favored. Presuming that no benefit attends this mode of treatment at the end of twelve hours, it will be expedient to attempt reduction by means of insufflation or forcible enemata. Considerable success has attended these measures. By far the best instrument for the purpose—no matter whether water or air is used—is the admirable insufflator invented by Mr. Lund. I think that in children under ten years of age the injection should be cautiously administered while the child is under the influence of an anæsthetic; but in patients above that age it is, perhaps, safer to carry out this treatment without chloroform. There is no doubt that in adults the best guide to the amount of force to be used is the patient's own sensation. In any instance the colon should be distended gradually. When the bowel is fully distended the air or water should be retained for at least twenty minutes. The injection may be accompanied by gentle kneading of the intussusception tumor, when such exists. I think that it is a matter of primary importance that the bowel should have been rendered quite still by means of opium or belladonna before the attempt at reduction by injection is commenced.

I cannot understand upon what mechanical principles the inversion or shaking of the patient is recommended in these cases. Before such a method were adopted the exact position and extent of the invagination would have to be most accurately diagnosed.

It is obvious that these measures will have no effect when once the invagination has become irreducible. It is to be regretted that at present little is known of the precise circumstances under which such irreducibility takes place. It is known that the invagination may become fixed within a few hours of its formation, and it is needless to remark that adhesions play comparatively a small part in causing an *acute* invagination to become irreducible. Should the measures so far advocated fail after a patient trial, I would strongly urge that a laparotomy be at once performed. If enemata fail early in the case, they are not likely to succeed at a later period, and every hour that elapses renders the prospect of gangrene more immediate.

Against laparotomy in these cases many objections have been urged. In the first place, it is pointed out that an acute attack may become a chronic one. This is true, but the occurrence is very rare. By far the greater number of the patients do not live long enough to enter upon the chronic stage. Moreover, chronic invagination is exceedingly fatal, and out of fifty-nine recorded cases, taken without any selection, I find that there were no less than fifty-one deaths. A far more important objection, however, depends upon the frequent occurrence of spontaneous cure at a period when the patient is *in extremis* and the case desperate. Temporizing is constantly being urged upon this ground. One case of spontaneous cure is an argument against a score of proposed operations. An examination of the matter shows that little dependence is to be placed upon this mode of ending. "Elimination of the gut by gangrene occurs in about forty-two per cent. of all cases; but when it has occurred it by no means follows that the patient recovers. In fact, no less than forty per cent. of the subjects of spontaneous elimination die of the immediate results of the process of separation. Moreover, during the first year of life spontaneous elimination occurs in only two per cent. of the cases, and between the ages of two and five in only six per cent.; and when it is remembered that more than fifty per cent. of the total number of examples of intussusception occur in children under ten, it will be seen that elimination by gangrene offers no very extensive prospects of spontaneous relief. It is true that the older the patient the more chance has he of recovery by this means; but it unfortunately happens that the older the patient the higher is the mortality after the occurrence of the elimination, so that the chance of cure becomes remarkably slight" ("Intestinal Obstruction"). In favor of the operation it must be pointed out that the affection is very acute, that the general mortality of the disease is seventy per cent., and that eighty per cent. of the patients die before the seventh day. I would venture to urge that in these acute cases laparotomy should be performed at least within the first forty-eight hours, and if possible within the first twenty-four hours, provided, of course, that all other measures have failed.

When the abdomen has been opened, the invagination should be reduced if possible. The reduction is best effected by squeezing the intussusception with one hand, while gentle traction is brought to bear upon the gut entering the invagination with the other. Should the mass be found to be irreducible or in a condition that threatens gangrene, the whole of the involved bowel should be resected and a temporary artificial anus established.

It appears to me that there is little to recommend the operation of enterotomy for this class of cases. This measure is certainly readily performed, but it is of the nature of a cut in the dark. It will relieve the obstructive symptoms, it is true; but it will leave the invagination untouched, and leave it possibly to pass on into a state of gangrene or a condition that may lead to diffuse peritonitis.

ANTIPYRINE IN RHEUMATISM.—Dr. Immermann has found antipyrine a most efficient remedy in acute and marked articular rheumatism. He states that it not only reduces the temperature, but also exerts a specific action on the joint manifestations. In one case of marked rheumatism of the trifacial nerve a permanent cure followed the exhibition of only one drachm of the remedy.

PRESBYKOUSIS.[1]

By D. B. ST. JOHN ROOSA, M.D., LL.D.,

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A CERTAIN degree of impairment or diminution of hearing power is, I think, inevitably an accompaniment of old age, or even of life after fifty years. This impairment or loss cannot usually be detected unless certain tests are employed, hence it is usually not noticed in ordinary intercourse. It is produced by a physiological or senile, rather than a pathological, change in the ear, and it is for this reason fairly analogous to presbyopia, and may be termed presbykousis.[2]

Presbykousis may be readily distinguished from the impairment of hearing resulting from chronic catarrhal or proliferous processes in the tympanum and Eustachian tube. By means of the tuning-fork (C^4) and watch, or acoumeter, we may make certain tests, more or less objective, which will make this differential diagnosis between these affections and the impairment of hearing arising from the inevitable changes belonging to advancing years. If a "C^4" tuning-fork be held while vibrating in front of the external meatus and then upon the mastoid process, presbykousic patients always, if they have no disease of the middle ear, hear louder and longer through the air than through the bone. If they do not, a morbid condition of the middle ear, a pathological change, is added to the senile changes. The tick of a watch or of the acoumeter is heard by presbykousic subjects relatively much worse than the human voice. Besides the evidences from these two tests, presbykousis is marked by the fact, that its subjects are more sensible themselves of the impairment of which they complain, than are those about them. In other words, although there is an actual loss of hearing, it does not appear in the ordinary social and business intercourse of life. The fact that the conduction of sound to the ear through the bones of the head, notably of the mastoid process, is lessened as years go on, has been observed, but no attempt has been hitherto made to give this fact any particular significance in relation to the hearing power, nor has it been noted that the symptom exists in old persons in connection with others—the others which I have just described.

It will also be found that persons who are presbykousic, like young persons with good hearing power, hear much better in a quiet place. Indeed, if the circumstances be favorable, if the room be quiet and the distance from the speaker be not too great, then patients not only hear well, but perfectly well. An octogenarian in excellent general health, who consulted me a few mornings since in regard to his sight and hearing, exclaimed, as we sat conversing in an ordinary conversational tone: "Why, I hear you as well as I ever heard any one in my life." And yet this gentleman, a lawyer, said that his hearing was not sharp. On inquiry, I found that he could hear the judge when the court-room was quiet; that he also could hear his clients in his consulting-room; that no one spoke to him of not hearing well; that he was chiefly troubled in noisy places, such as a railway train or a large and vivacious dinner-party, or when the voices or other sounds came from a great distance. This inability to hear at long range is not marked, for the presbykousic patients that I have tested, if free from any inflammatory trouble of the middle ear, can hear an ordinary voice addressed to them in a quiet room, when in a listening attitude, at least fifty feet.

How much worse is the condition of a person, young or old, who suffers from a chronic catarrh of the Eustachian tubes and tympana! He hears badly under all the conditions of ordinary human intercourse. It is only in a din that his hearing power becomes acute enough to enable him to follow and join in ordinary conversation, although carried on very near him, no matter how distinct the tones of the speaker, nor how quiet the room. He thus finds himself unable to carry on any ordinary business, or hear a lecture, a play, or a sermon. His usefulness in any such profession as law or medicine is greatly impaired, if not destroyed. The presbykousic patient, on the other hand, may be greatly annoyed by the subjective loss of which he is so conscious, and which he usually and correctly attributes to senile decay; but he may so arrange matters—not as he does to relieve his presbyopia, by glasses—so as to go on with the ordinary work of life.

The anatomical conditions which form the basis of presbykousis, in the absence of *post-mortem* examinations of a large number of ears of old persons, cannot, as yet, be positively determined. The evidence of the tuning-fork points toward a lessening of the perceptive power of the acoustic nerve. Indeed, the symptoms are characteristic of those generally considered as evidences of a lesion of the nerve. It is possible that there are more factors than one involved in the causation of presbykousis, as there are in presbyopia. Besides the changes in the nerve, there may be, as suggested by Orne Green,[1] a senile dryness and rigidity in all the tympanic structures, a want of vacillancy, which prevents a normal vibration of the drum-head, and a proper conduction of sound to the senile nerve.[2]

It is not probable that presbykousis is caused by abnormal pressure through the base of the stapes bone upon the vestibule and semicircular canals, for vertigo does not attend it.

[1] Read before the American Otological Society, July, 1885.

[2] From πρέσβυς, an old man, and ἀκούω, I hear. Presbykousis is a more euphonious word than presbyakousis, and I hope etymologists will justify me in dropping the vowel.

RECTAL ABSORPTION CONSIDERED THERAPEUTICALLY AND WITH ESPECIAL REFERENCE TO THE RELIEF OF CONSTIPATION.

By C. M. FENN, M.D.,

SAN DIEGO, CAL.

HITHERTO the rectum seems to have been studied from an exclusively pathological standpoint, while its lesions have been relegated chiefly to the domain of surgery. Anatomical authorities have seldom done more than describe it as a portion of the colon, and define its surgical relations. Physiologists also have been silent as to any special or important function that it may possess, aside from defecation, being satisfied to regard it as a division of the large intestine, "the office of which is mainly confined to the separation and discharge of certain excrementitious substances;" or still further ignoring its capabilities, to style it "a reservoir for the fæces as they pass from the colon." More recently O'Beirne, Bodenhamer, and others, have been discussing the existence and purposes of its sphincters, in the endeavor to settle certain anatomical and technical questions which they evidently regard as *sub judice*.

For centuries, it is true, clysters have been employed to improve the complexion, to relieve the lower bowel of a portion of its contents, and as doubtful adjuvants to slowly-acting cathartics. But their action was supposed to be chiefly mechanical. In certain emergencies, also, physicians have resorted to medicated injections and suppositories to mitigate pain in the adjacent organs. Nourishing enemata were recommended by the divine Celsus as early as 50 A.D.; but the reliance upon such methods to sustain life, besides being of comparatively modern origin, is yet attended with doubt as to their efficacy. I am not aware, however, that any writer has yet suggested, or attempted to demonstrate, the probability of any other function pertaining to the rectum than that of defecation.

[1] Discussion: American Otological Society, July 15, 1885.

[2] The term presbykousis cannot be fairly criticised because the conditions causing it are not completely analogous to the changes in the crystalline lens and the ciliary muscle, for presbykousis means simply the hearing of an old person, having nothing to do with its causes, as does presbyopia, the *sight* of an old person.

At times, during the past two years, availing myself of such meagre facilities as are afforded by a private practice, I have been pursuing certain studies and experiments which have convinced me that the entire function of the rectum has not been fully appreciated, if, indeed, understood. That it is not sufficiently appreciated may be fairly inferred from the recent researches of Fubiné, with reference to the power of the lungs to absorb defibrinated blood; of Ziemssen, with subcutaneous injections of human blood; and from such comments thereon as the following, from a leading medical journal:[1] "It would be a great help in therapeutics if the functions of the stomach could be temporarily transferred to the lungs, . . . thereby giving the affected organs a rest."

Reasoning from analogy, then, the relative importance of any organ of the human economy may be predicated if it is a duplicate; if it is composite in construction and character, and especially if it is well provided with those elements of action, nerves, blood-vessels, etc. Furthermore, its lesions bear a striking relation to its functional activity. Now, whether we regard the rectum as a duplicate of the stomach, which it greatly resembles in everything save the ability to elaborate peptones, or consider its highly organized structure (in connection with the fact that defecation can be successfully performed through an artificial anus), the conclusion is legitimate that it is something more than a mere gateway for the passage of fæces.

Anatomically viewed, the rectum is the terminal eight inches of the large intestine, capable of great distention, empty except during defecation, and somewhat abruptly putting off the semblance of the lower bowel, of which it forms a part. It is but little shorter than the stomach, and has all of its muscles except the oblique. In the vascularity of its mucous membrane, as well as in many other respects, to which attention will be called as we proceed, it resembles the small intestine. Contrasted with the colon its longitudinal muscular fibres are no longer so distinctly marked, while the circular fibres, arranged in a thick, uniform layer, combine to form the sphincter; its sacculated appearance is lost, and the tube becomes a cylinder, contracted at each end. The connection between the muscular and mucous coats is much less intimate than that of other portions of the intestine, and in this respect, also, is suggestive of the upper portion of the canal. Still greater differences are presented by the mucous coat or membrane, which, pale and comparatively smooth in the cæcum and colon, now becomes thicker and much more vascular. When contracted the membrane is gathered into folds, called by Morgagni columns of the rectum. It also forms three valvular prominences of crescentic shape, their free surfaces looking upward and inward, which may be likened to the valvulæ conniventes of the small intestine. Like the jejunum, it is paved with columnar epithelium. The villi, which disappear at the termination of the ileum, again make their appearance and are inverted. They are so numerous, also, that the width of the intervening tissue is said to be "only one-sixth of the diameter of the follicle."

From the brief description given above it will have been observed that the structure of the rectum is not only in striking contrast with that of the colon, but that it is also of a composite character, so to speak, resembling the œsophagus, stomach, and portions of the small intestine, besides having peculiar features of its own. It will not be necessary to refer in detail to the number and size of the lymphatic vessels and glands of this region, nor to the extensive and elaborate arrangement of the nerves, which are derived from the cerebro-spinal and sympathetic systems. The evidence would be simply cumulative.

Whatever may be our conclusions with regard to so large a number of nerves and lymphatics as connected with a simple excremental gateway, the immense number of its follicles, and especially its vascular supply, are of still greater interest in this discussion, and point to some function more important than secretion and defecation. Whether the follicles secrete or absorb, for purposes of defecation an artificial anus has been found sufficient. Its arterial pabulum, then, is derived from two large arteries, the superior and middle hemorrhoidal, and three smaller ones, making five in all, whose aggregate volume must quite equal that of the three gastric arteries. Of its three sets of veins, the internal hemorrhoidal is chiefly concerned in the function which we would accord to the rectum, viz., the absorption of alimentary, and especially of medicinal substances. The latter certainly are not involved in the doubtful question of peptones. Having verified, by dissections, Kelsey's very accurate description of these veins, I have less hesitancy in using a few paragraphs from his recent monograph.[1] He says: "When the venous circulation of the rectum proper is injected from the inferior mesenteric vein, three or four large venous trunks may be seen on the external surface of the rectum, ascending on the sides and posteriorly. These veins make their appearance suddenly by five or six branches, which peforate the wall of the bowel about three inches from the margin of the anus. If the rectum be opened longitudinally, and the mucous membrane dissected up to a sufficient height (about four inches), it will be seen that these five or six large veins, already visible on the outside of the bowel, come from within, and that they have already pursued quite a long course under the mucous membrane. They are formed by collateral branches, and especially by about a dozen primitive branches which originate about half an inch above the anus, and ascend in parallel and flexuous lines for several centimetres, to unite into common trunks. (The main trunks referred to, stand out in such bold relief that injection is not required to render them visible. The primitive branches also can be made out clearly by holding the intestine up to the light. From my observations, the accessory branches, or veinlets, are so numerous as to give to the membrane the appearance of a net-veined leaf.) Each of these little ascending branches

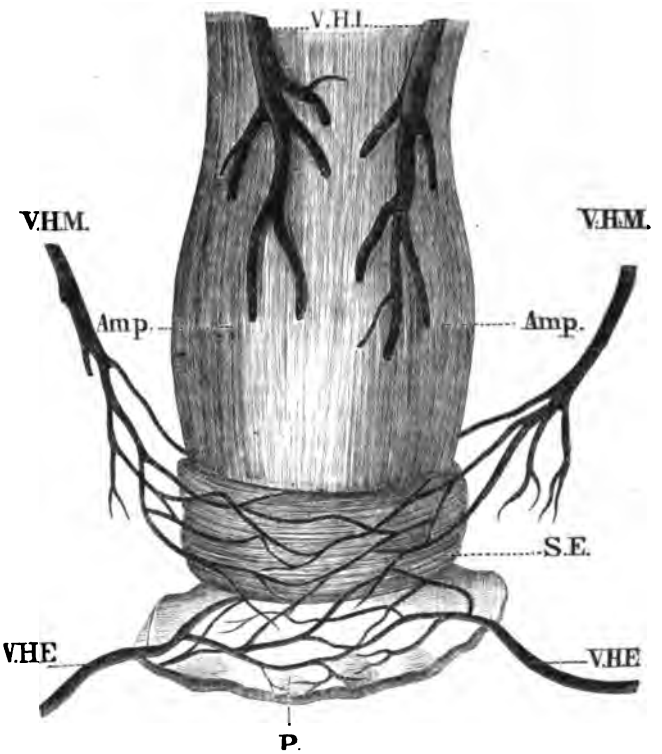

FIG. 1.

[1] New York MEDICAL RECORD.

[1] Diseases of the Rectum and Anus. (See also woodcut from same work (Fig. 1), showing internal hemorrhoidal vein and ramifications.)

has its origin in a minute pool of blood, the size of which varies in the normal state from that of a grain of wheat to that of a small pea. (In one of my dissections, several of these radicals arose from quite a lacuna of blood near the anus. I did not make out the little pools as clearly as described by K.) These little sacs are arranged in a circular form around the extremity of the rectum. If carefully dissected, they may be seen to be connected with the little veins before mentioned, and also with another little vein which perforates the internal sphincter near its lower edge, and empties into one of the rudimentary branches of the external hemorrhoidal plexus. Many of these little communicating branches between the external and internal hemorrhoidal systems pass through the substance of the external sphincter." It is worthy of remark that, through the hemorrhoidal plexuses, there are anastomoses with the internal iliac veins, by which a direct channel, or communication, is made with the general circulation, while the mesenteric veins which relieve the small intestine, and the large one as far as the descending colon, convey their blood directly to the liver, via the portal vein. May not this in part explain Savory's experiment, showing a more rapid absorption of strychnine per rectum than through the stomach?

Having demonstrated the presence of veins in such large numbers and of such peculiar arrangement, it will only be necessary to refer very briefly to the important function performed by these vessels in other portions of the intestine, and system generally. The intestinal villi, for example, are essentially vascular organs, consisting of epithelial cells covering a network of blood-vessels, while the duct found in each is probably its excretory tube. The occasional presence of fat in the blood, though in small quantity, is a proof of venous absorption, as it could not enter through the lacteals without modification.

Panizza's [1] old, yet interesting, experiments in this line demonstrated that the blood-vessels absorb fluids from the intestinal canal even more rapidly than the lacteals. Küss [2] says that poisonous substances are undoubtedly absorbed by the veins, intoxication taking place so rapidly that the poisons can scarcely be supposed to pass through the lymphatics. Savory's [3] experiment with strychnine, already alluded to, is yet another evidence of this venous function. As a matter of fact, the veins, in contradistinction to the lacteals and lymphatics, may be called the common carriers of the system. This process is repeatedly and well shown in the liver, to which the veins bring materials for the formation of bile, and in certain pathological states diffuse it through the system. The sugar secreted is taken up by the veins and eliminated through the kidneys. "Albumen is transformed, because it comes in contact with the hepatic cells by means of the portal circulation." If these are facts, the question naturally arises, Why may not saccharine and albuminous, in fact, all substances, be taken up by the rectal as well as the portal veins?

Let us now recall a few facts taken at random from comparative and human physiology.

The powerfully digestive function of the lower bowel in solipeds is well established. Again, Bauer [4] has shown that the rectum of the dog can absorb pure albumen, as well as acidulated and saline meats. Liebig [5] found that a solution of salt (one to eighty) was entirely absorbed by the rectum within an hour. A recent investigator,[6] after injecting arsenic into the rectum *post mortem*, found it diffused through the intestine and system.

Upon the supposition that the rectum had neither digestive nor absorptive power, because unable to change colloids into crystalloids, it has been attempted to explain the disappearance of various enemata by *retrostalsis*. A recent contributor to one of our medical journals [1] vouches for the presence of portions of an injection in the small intestine, and for the taste of quinine introduced per rectum. So, too, the "Medical and Surgical History of the War" [2] cites instances of rectal injections reaching the stomach. *Per contra*, Dana's [3] experiments upon sixteen living dogs, seem to establish the fact that fluids, even in large quantity, *seldom* penetrate beyond the ileo-cæcal valve, and hence do not reach the so-called absorbent territory. Professor Dawson,[4] of the Ohio Medical College, in summing up the results of fourteen injections, two of which passed the valve, says, "the experiments performed show that the valve, when intact—when in normal condition—will not allow retrograde passage." Inasmuch as large quantities of fluid and force are required to penetrate the valve, the question does not particularly concern us.

Still further evidence of the existence of this function of the rectum may be drawn from the many cases [5] of rectal alimentation lately placed upon record. Flint writes of a patient whose life was prolonged for fifteen months chiefly by the aid of nutrient enemata. Another case, occurring in a German hospital, was not only kept alive for a considerable period, but gained a pound in weight in one month. C. Kay, Jr.,[6] records, as an evidence of retrostalsis (?), a case of peritoneal tuberculosis kept alive by rectal injections for more than three months. A foreign journal [7] gives an instance of a Roumanian wine-merchant, whose throat was cut by gypsies. By rectal alimentation his life was sustained for two years, until the œsophagus was restored.

I may be pardoned for giving here the details of a case which came under my own observation and treatment about two years ago, especially as it suggested the studies embodied in this paper. It was a typical and protracted case of gastritis, with all the attendant symptoms, such as nausea and retching, burning palms, constipation, low fever, and, of course, great prostration. For more than six weeks there was complete intolerance of solids as well as liquids, even melted ice being regurgitated. Hot-water draughts had not then become so fashionable as at present, though my patient used large quantities of it per rectum. Nourishment was administered only through the same channel. For the constipation, clysters of tepid water, sometimes with the addition of olive oil, were almost daily employed, some of which produced evacuations, while others were absorbed. Her condition was still further complicated from the fact that, believing herself of bilious habit, she had for a long period been tampering with patent and other remedies for the liver, and in the absence of its accustomed stimulant, besides its sympathy with the stomach, this organ now ceased to act. A dose of calomel was given, and after a considerable interval an attempt was made to assist its action by carefully selected adjuvants. But the result was so disastrous that no further appeals were made to the stomach. The exigencies of this case, then, taught me that not only was it possible to sustain life by food administered through the rectum, but that the liver could also be reached through the same avenue.

I need not stop to discuss the question of peptonizing alimentary enemata. As a matter of fact, nitrogenous and albuminous injections have been employed with more or less success for centuries, while the use of peptones as an aid to digestion is of comparatively modern origin. Furthermore, as most medicinal substances are not included in either of these classes, they require no such adjuvants for their assimilation.

I now come to a summary of facts, or "provings," as our homœopathic *confrères* might style them, most of which personal observation and repeated experiment permit me to corroborate. For example, the cathartic effect of aloetic injections has been frequently noted. It

[1] Dalton's Physiology. [2] Küss' Physiology. [3] Gazette Médicale, 1864.
[4] Therapeutical Gazette, 1883. [5] Liebig's Animal Chemistry, p. 77.
[6] Medical World, 1884.

[1] Medical Age, March, 1885. [2] Part II., p. 836.
[3] New York Medical Record, 1883. [4] Lancet and Clinic, February, 1885.
[5] New York Medical Record, 1878. [6] Medical Age, May, 1885.
[7] British Medical Journal, 1883.

has often become necessary to suspend their use because of even drastic tendency. "Headland," I believe, says that many remedies are absorbed and eliminated near the same region. Upon that theory, gums, resins, and medicines which do not seem to act until they reach the colon, should be introduced into the rectum. Inunction of the rectum with mercurial ointment will often not only produce loose evacuations, but if employed in sufficient quantity will act as a cholagogue. For certain types of constipation it is often only requisite to anoint the rectum with the unguent the previous evening. If guarded with sufficient opium or belladonna, and repeatedly applied, the specific effect of mercury may be expected; in fact, with more promptness than when rubbed into the skin. In some instances, by rectal medication I have been enabled to cause the expulsion of tæniæ which had resisted the usual methods. In certain cases of gonorrhœa, in which idiosyncrasy of the stomach precludes the continued exhibition of copaiba, cubebs, and oil of sandal-wood, I introduce capsules of the same into the rectum. I believe that the duration of the disease can be materially curtailed by this method, to say nothing of relieving the stomach from such nauseous dosage. Uterine and vesical hemorrhage can be more promptly arrested by administering ergot and other remedies per rectum. A few minims of copaiba, in capsule or emulsion, introduced into the rectum of the child, will ward off many an impending attack of spasmodic croup! In several rheumatic cases, requiring remedies for the relief of constipation, I have employed suppositories of blue mass, colocynth, physostigma, or aloes, as the occasion suggested, with satisfactory results. I have repeatedly noted the disappearance or absorption during a night, of fifteen grains of blue mass, with half as much colocynth. In two cases of paraplegia, a combination of aloes, calabar bean, or cascara sagrada, with or without belladonna and nux vomica, was quite sufficient to regulate the bowels for long periods. Ox-gall in form of suppository, or incorporated with fluid menstrua, not only softens scybala, but not infrequently relieves the constipation arising from a deficiency of the natural secretion. Enemata of hamamelis virginica I regard as almost specific in cases of intestinal hemorrhage, whether of hemorrhoidal or higher origin. Some months since, the writer was summoned in consultation upon a critical case of intestinal obstruction, which had already reached the stage of stercoraceous vomiting, etc. Copious clysters of various kinds having been frequently repeated without accomplishing the desired result, at my suggestion a small injection of olive oil with a few drops of croton oil was employed, and with almost magical effect. Within fifteen minutes the normal peristaltic action seemed to be restored; large doses of castor-oil, as well as nourishment, were retained by the stomach, and convalescence was uninterrupted.

Within a twelvemonth, ether [1] has been successfully administered per rectum, both in Europe and on this continent. Dr. Pepper,[2] of Philadelphia, also reports the successful use of chloroform in the same way. Drs. Vincenzo,[3] Cantani, and others, during the recent epidemic of cholera at Naples, tried injections of tannic acid and opium with excellent results. More recently the panacea, muriate of cocaine, has been employed by injection into rectum and piles,[4] rendering the operation for hemorrhoids a painless one.

But I need not further multiply instances from my own notes, nor from current medical literature. It is evident that, as never before, the profession is directing attention to the possibilities of the rectum as an aid to therapeutics, and the object of this paper is to assure them that their "faith is well founded;" that rectal absorption is no longer a matter of speculation and theory. Furthermore, in my opinion, the time is not far distant when this method of therapeusis will at least supplement, if it does not supplant, most of the means now employed to "regulate the bowels;" the fact that nine-tenths of all cases of constipation, acute and chronic, originate in the large intestine, from want of contractile power, irregular peristaltic action, flatulent distention, and deficient moisture, should stimulate us to further investigation and experiment in the direction I have endeavored to indicate. Besides this, the mobile colon, with its gas-harboring flexures, is a most fertile source of the left-side pains, and of many other functional and sympathetic disturbances of thorax and abdomen, which can be soonest dispelled by remedies administered through the rectum. Furthermore, the class of medicines called irritant cathartics, including most of the resins, are absorbed, it should be remembered, with difficulty, if at all. It is manifestly unphilosophical, therefore, as well as hurtful, to pass these through twenty feet of normal intestine, when the colon alone is responsible. An authority [1] upon this subject has written: "Whenever a practicable line of treatment, with little or no medicine, can be successfully adopted in any individual case of constipation, such treatment certainly claims a primary consideration;" meaning, I infer, that the best course is one which interferes least with the general system. In this view of the case, I can suggest nothing better than rectal medication. Yet I would not ignore the hypodermatic use of remedies, a method susceptible of extended application. In my opinion, the administration of medicines should be, and ultimately will be, restricted to these two means. The size of the dose should be diminished, and the interval of administration materially shortened, especially in maladies attended with suffering. When these methods prevail, as I believe they will, the liver and pancreas, so rarely at fault *per se*, will not be called upon to respond to every cathartic combination, and the now much-abused stomach will assert and maintain its prerogative to be the receptacle for food, and food alone.

A few details as to the *modus operandi* may not be out of place at this point. Drugs must be selected, and the quantity modified with reference to the immediate or remote, moderate or full, effect desired. There must also be discrimination as to the doses for different individuals; as for example, the fourth of a grain of belladonna will sometimes seriously disturb vision. The law of endosmosis does not seem to prevail here, whatever may be the fact in other portions of the alimentary canal, the specific gravity of an enema being of less importance than its bulk. Powders may be incorporated with vehicles of varying consistence, of which morphine in water, or dry in capsule, may be taken as a type. In the absence of capsules, syringes, and ointment instruments, one may use blue mass, mercurial ointment, and some of the extracts in mass, though it is better to wet them up with syrup or glycerine. With a little dexterity in manipulation, a bolus or suppository may be introduced into the rectum at bedtime, with fair promise of an evacuation in the morning. For general purposes, the most convenient appliance that has yet come to my notice is a hollow shell, or capsule, of cacao butter, with adjustable cap, manufactured by Hall & Ruckel, of New York. There are several sizes of these, and to fill one of them with powders or extract is the work of a moment. Although drugs seem to be quickly diffused over the absorbent surface by these means, I have thought a long rectal suppository, or bougie, might offer some advantages. Emulsions, if not too bulky, form eligible vehicles for some medicines. If from any cause, such as hemorrhoids, the rectum is irritable or intolerant of medication, it is well to add a portion of belladonna or opium to the dose. Besides this, the former possesses laxative properties, and often may profitably enter into the combinations against constipation. Nux vomica is also a desirable adjuvant where deficient peristaltic action or absence of muscular

[1] Therapeutical Gazette, 1885.
[2] Lancet, February 21, 1885.
[3] American Medical Journal, July, 1884.
[4] H. A. Smith, M.D., Medical News.

[1] Birch on Constipation.

tone is the cause of trouble, its tonic effect seeming to be increased by such immediate application.

In conclusion, we find the rectum to be the antipode of the stomach, as to its position in the alimentary tract, yet presenting many analogies to the latter. It is capacious and, for the most part, empty. As a reservoir, it is superseded by the sigmoid flexure of the colon, and is not indispensable in defecation. Its mucous membrane is thickly inlaid with Lieberkuhn's follicles, or inverted villi, which must be allied in function to those organs in other portions of the intestine, or be superfluous. Besides these, and beneath them, we meet with a congeries of veins and capillaries, or veinlets, which are at least suggestive of the portal vein and its capillaries.

The preponderance of evidence is against retrostalsis, except in rare instances. But admitting the permeability of the ileo-cæcal valve, even under circumstances of great force or quantity, we shall derive no assistance from the lacteals, for the reason that they are especially arranged for the absorption of fat, and are probably only active during digestion. It therefore becomes a question of villi and capillaries at last.

Accumulated facts outweigh all theories with regard to rectal absorption.

Medicinal substances do not require peptones for their digestion and absorption, and, with suitable appliances and in proper combination, may be administered in this way, to the great relief of the stomach and with full assurance of the desired effect.

Clinical Department

THE TREATMENT OF DIPHTHERIA.

Dr. J. W. Alexander, of Newark, O., writes in favor of the constitutional treatment of diphtheria. He thinks that local applications of any sort are of doubtful utility, although, as palliative measures, antiseptic and disinfectant washes are not to be ignored. All caustics and irritants are injurious, he maintains, and should never be used. The following is the formula which he has used with success in many cases: ℞. Chlorate of potassium, 40 grains; simple syrup (slightly warmed) 2½ ounces; dissolve and add aromatic sulphuric acid and tincture of chloride of iron, of each one fluidrachm. The dose for adults is a teaspoonful every two to four hours, according to the urgency of the case. As soon as the symptoms begin to improve the dose should be decreased and the interval extended, but the remedy should not be discontinued until the throat is entirely free from the diphtheritic deposit. Dr. Alexander states that he has used this method of treatment constantly for several years, during which time he has lost but one case of diphtheria, and that one was not seen until the disease was too far advanced to be stayed by any remedy. He writes in conclusion: "It may seem that there is nothing remarkable in the above combination, as chlorate of potassa and tincture of iron are used by nearly everyone, but the union of the three articles combined in these proportions has produced very marked results. I will not attempt an explanation of the *modus operandi* of this medicine, but will leave it to those who are more competent; but if I can persuade any of my professional brethren to give this simple remedy a trial, I shall have accomplished my purpose."

TRAUMATIC TETANUS—RECOVERY.

In January of the present year, Dr. J. G. Stair, of Manteno, Ill., reported a case of traumatic tetanus which resulted fatally, notwithstanding a most heroic treatment with bromide of potassium, gelsemium, and chloral. A second case, which was recently under his care, has terminated in recovery. The patient, Mrs. M——, fell against an old corn cultivator, cutting the palm of the hand near the thumb on the rusty corner of one of the shovels or ploughs, forming part of the machine. The wound was about three-fourths inch in length and one-eighth inch in depth, caused the patient no anxiety, and had nearly healed without suppuration on the third day after the accident. At this time Mrs. M—— was seized with stiffness of the muscles of the left arm and the jaw, and pain, which started from the wound in the hand and extended up the arm to the jaw and the epigastrium. Soon the paroxysms became more general and involved all the muscles of the body; they continued for from one to two hours, and recurred at varying intervals of six to thirty-six hours. During the first week of the disease the temperature was 101° F., and the pulse ranged from 120 to 130. In the second week the temperature was from 99° to 99.5° F., and the pulse-rate between 90 and 100. The treatment consisted in the administration of bromide of potassium, chloral hydrate, and fluid extract of physostigma. These were given in succession until their physiological effects were observed. In addition, morphine was given in small doses as needed, to induce sleep. The wound was thoroughly cauterized with nitrate of silver and nitric acid, and covered with a soft poultice; it was freely incised several times and bled quite freely. A fly-blister was applied along the whole extent of the spine, and ice was placed from time to time over the lower portion of the back. Cascara and calomel were also given as occasion required. In two weeks the paroxysms ceased, and at the time of writing Dr. Stair reports the patient as having nearly recovered her usual health.

ACUTE ŒDEMA OF THE EPIGLOTTIS.

Dr. G. B. Hope, of No. 34 West Fifty-first Street, reports the case of a man, fifty-four years of age, who presented himself at the clinic of the Post-graduate Medical School, suffering from urgent dyspnœa. Laryngoscopic examination showed acute œdema of both ventricular bands rising high in the larynx, with the narrowest possible opening of the glottis, especially during inspiration. The swelling was most pronounced in the anterior portion, though pretty general throughout, and the cords were not visible in any part. Following the examination such a marked spasm occurred as seemed to threaten suffocation and to demand instant tracheotomy. The extreme urgency passed by, however, and as soon as a laryngeal knife could be procured the parts were freely incised. There was considerable hæmorrhage, and the relief afforded by the operation was immediate. There was no return of the œdema, and four days later the parts had resumed their normal appearance. Subsequent examination showed that the œdema was limited chiefly to the epiglottis and aryteno-epiglottic folds. The shape of the epiglottis was somewhat unusual, it being more than ordinarily short and broad, and when first examined had an appearance like that presented by the ventricular bands when largely infiltrated. The cause of the attack appeared to have been irritation, excited by the use of the finger in the throat to provoke vomiting. This case shows the readiness with which even extreme œdema may yield to free incisions, the necessity of the graver operation of tracheotomy being thus obviated.

HOUSEMAID'S KNEE—RECOVERY WITHOUT REMOVAL OF THE SAC.

Dr. Charles H. Carter, of Chicago, Ill., relates the case of a plasterer, aged thirty-four, who had received a fall three weeks before coming under observation, striking his knee against the edge of a board. No pain was felt until about a week after the injury had been received, at which time also a swelling was noticed. This tumor increased in size until it covered the lower two-thirds of the anterior surface of the patella, and was found to contain pus. There being no time for temporizing, Dr.

Carter proceeded to operate as follows: "With a bistoury I made an incision from above downward on the external side of the swelling, carrying it, with the aid of a grooved director, to the extreme lower limit of the cyst, so as to avoid leaving a 'pocket,' and to facilitate complete evacuation. The incision was made on one side, and from above downward, rather than from side to side, to prevent any gaping of the wound when the knee was flexed.

"After thoroughly emptying the sac by gentle pressure and gravity, I washed out the cavity with a two per cent. solution of carbolic acid in hot water, continuing until the water returned perfectly clear and unstained by either blood or pus. The time consumed by this part of the operation was probably ten minutes. I used hot water because that was more certain to dislodge any portion of pus which might, by its greater consistence, be retained around the edges of the sac, where the walls are reflected on the surface of the patella.

"Gently pressing out the water, but not taking any pains to thoroughly empty the sac, I carefully brought together the edges of the wound and hermetically sealed it with strips of silk isinglass-plaster, moistened with a ten per cent. solution of carbolic acid. Then, with the leg extended, I applied strips of mole-skin plaster to the whole knee-joint. I used strips about half an inch wide, and long enough to go about three-fourths around the joint, leaving the posterior surface uncovered.

"Commencing above the patella, I applied the first strip, drawing the ends strongly downward. The second slightly overlapped the first in front, but nearly covered the ends of it on the sides. The strapping was continued in this manner so that the strips firmly compressed every portion of the emptied sac, keeping the walls accurately in contact. The patient did not experience the least pain or discomfort in the part after the dressing was applied.

"Using no further means, except complete rest and low diet, I removed the dressing on May 5th, four and one-half days after the operation, and found the sac perfectly closed and not a drop of liquid to be felt in it.

"After remaining in-doors two days longer, the man went to his work, and has had no sign, as yet (June 30th), of a return of his 'housemaid's knee.'"

How an Opium Habitué was Cured.—Mr. S. T. Morton describes in the *Popular Science Monthly* his personal experience with opium, and denounces in vigorous terms the practice of treating opium-eaters by sudden withdrawal of the drug. He says: "I had been an *habitué* ten years, having reached at the end of that period the daily amount of thirty-six grains of gum-opium, taken only into the stomach. The 'habit' had been begun by a very small amount, and its increase had been extremely gradual. I knew not where to turn for help in effecting a cure: one thing seemed certain, it could not be done without help. At a venture merely, I called upon the late Dr. George M. Beard, feeling that, at any rate, I should be free from the risk of charlatanism; and I shall always remember him with gratitude, for it was through his recommendation that I placed myself under the care of another physician, who immediately undertook the treatment of my case. The gentleman whom, through the good fortune of Dr. Beard's introduction, I thus came to know, I found to be a young man, in the prime of good health and spirits, and one who at once inspired me with that confidence so important in such a case. His residence, it was manifest, was no ordinary 'institute' or 'asylum.' I was simply a courteously received guest in a private family." The patient was not placed under restraint, and was allowed to walk out and ride alone. His opium was gradually reduced until at the end of a week it was all withdrawn. He was subjected only to tonic treatment, and in the course of a few months was practically well. For a long time after, however, he was reminded at times of his old enemy.

Progress of Medical Science.

The Cutaneous Manifestations of Gonorrhœa.—M. Andret affirms that gonorrhœa may cause erythema of a nodose or papular kind and a rash resembling scarlatina. The author reports a case of "scarlatiniform erythema," and attributes such eruptions to the specificity and virulence of gonorrhœa, which, in his opinion, is a parasitic disease, depending on the presence of a special micro-organism. M. Raoul Mesnet, like M. Andret, looks upon gonorrhœa as a parasitic disease (*Thèse de Paris*), and, as such, liable to affect the skin like other infectious maladies. The greater part of the rashes commonly attributed to copaiba and similar drugs, the author considers to be really due to the gonorrhœa itself. Balsamic drugs alone, he maintains, cannot cause erythema, because they do not do so when given in other diseases than gonorrhœa; nor can the continuance or return of the eruption be procured by the administration of the drug even in large doses. Gonorrhœal eruptions are polymorphous (nodose, scarlatina-like, measles-like, etc.), and generally occur only in patients who have other symptoms of infection. They are usually accompanied by fever, and sometimes by a general condition of some severity. These eruptions cannot be dependent on reflex vaso-motor disturbance, which Lewin believes to be their cause; they are probably due to the presence of the gonorrhœal micro-organisms in the skin.—*London Medical Record*, June 15, 1885.

The Anæmic State.—At a recent meeting of the Brighton and Sussex Medico-Chirurgical Society (*The British Medical Journal*, July 4, 1885), Dr. Joseph Ewart read a paper on the anæmic state. This was manifested as an antecedent, accompaniment, or sequel, of specific fevers and "constitutional" diseases, of many local disorders, and of derangements which interfered with the nourishment of the blood or its depuration. As regarded the white and red corpuscles, it was probable that the same mode of genesis which led to their evolution in the blastema of the area vasculosa of the embryo, continued to insure their renewal and repair during their fully developed condition in thoroughly oxidized blood. Why should it be doubted that the red corpuscles possessed independent and self-reproductive powers? They were the analogues of the lungs, modified in structure, constitution, and distribution, so as to effect the interchange of oxygen and carbonic acid in the minutest recesses of the economy. The various phases of the anæmic state were then detailed; and, with regard to treatment, it was needful to note diathesis and temperament. In most cases, regulation of the bowels, improved hygiene, and open-air exercise, sufficed, especially if coupled with removal of the cause. In others, ferruginous preparations were demanded; the necessity of keeping the bowels free by means of salines in all cases of constipation being remembered. It had often seemed to Dr. Ewart, in managing malarial and other forms of anæmia, in which there was frequently manifested great intolerance of steel, that changing the particular preparation employed, a reduction of the dose, or a diminution of the number of doses administered in a given period, sometimes sufficed to get rid of the fulness in the forehead, headache, indigestion, and gastric or intestinal irritation attributed to its use. But, in the main, in such cases, and they were numerous, perhaps the best plan was to give very minute doses indeed; to assimilate them, in this respect, as much as possible to the condition in which they were found in chalybeate waters in a most diluted form, so that they might be taken between meals in large quantities of water during those periods of the morning and afternoon when out of-door exercise could best be taken. In summer, Dr. Ewart invariably recommended such persons as could afford it to try the excellent chalybeate springs of St. Ann's Well, Brighton, Tunbridge Wells, or Harrogate;

or the pure iron waters of Schwalbach or Spa; or the compound iron springs of Pyrmont, or St. Moritz, etc., under the direction of one of the physicians on the spot, and with the best results. Digestion, assimilation, and the nutrition of the blood, as regarded both albuminous material and the red corpuscles, were promoted by good but not too rich food, by drinking of the mineral waters, by open-air exercise, suited to the growing capabilities of the patient under the most agreeable surroundings of fine equable weather; by brilliant sunlight, tempered by abundance of shade; by society, and the best of music. The same mode of management was applicable to chlorosis, also, in anæmic Anglo-Indians, who had returned to their native country after long residence in or near the tropics; but very free purgation to remove portal plethora in such patients was necessary when the treatment was conducted in this climate. In the winter there was often practically no alternative. But in summer it was better to recommend them to drink, first, the saline waters of Carlsbad or Homburg on the spot, and to wind up with a course of any of the chalybeate springs already mentioned.

THE CRIMINAL RESPONSIBILITY OF DRUNKARDS.—The Paris correspondent of *The British Medical Journal* (July 11, 1885), writes that M. Mottel, at a recent meeting of the Académie de Médecine, treated the important subject of the responsibility of criminal drunkards. Crimes, murders, etc., committed when the perpetrators are under the influence of drink, are much on the increase. Alcoholism at the present time presents unusual characteristics. M. Mottel believes that MM. Dujardin-Beaumetz and Audigé's researches explain this. Manufactured spirits currently sold are more toxic than pure vinous alcohols; they contain empyreumatic substances, which exercise a most dangerous influence on the nervous system, which is manifested by sudden fits of frenzy, and savage and brutal impulses. Magistrates are at a loss how to judge a criminal who suddenly commits a crime without any reason or previous intention. If the momentary delirium were the result of a former cerebral lesion of alcoholic origin, the medical expert's evidence would give some clue; but after the momentary influence of these manufactured spirits has passed away, the drunkard is in a normal condition, and no symptoms can be detected suggesting the probability of a return of mad impulses.

TRIGGER-FINGER.—Several Italian surgeons have recently published observations on the *dita a scatto*, or trigger-finger, first described by Rusconi in the *Gazzetta degli Ospitali*, in 1878. This affection consists in a sudden check to voluntary extension or flexion of a finger, only overcome by a violent effort, or by the aid of the other hand, when the finger suddenly completes the desired movement with an audible snap. It most frequently attacks the thumb and ring-finger, but has been observed in other fingers, in several simultaneously, and also in the toes. The patients are generally between forty and sixty years of age, and men are less frequently affected than women. Rusconi has collected thirty-six cases. Romei has since (1884) described another case in the same journal above quoted; the patient was a woman, sixty-five years of age, and the ring-finger was the part affected. Solaroli gave notes of a severe case, where the great toe was involved, in a strumous housemaid, twenty years of age. In one-third of the cases already observed, rheumatism was the predisposing cause; in others, there was a distinct history of injury; in some, the origin of the disorder could not be traced. There is generally severe pain, and in the cutaneous fold between the first phalanx and the palm, a thickening has been detected. Possibly this condition may indicate some inflammatory change in the tendons or their sheath, or even a loose cartilage, as in the knee-joint. Notta and Nélaton speak of a distention of the blind end of the synovial sheath at the free border of the palmar fascia, observed when the affected finger moves in the act of writing; some distinct protuberances have also been detected on the bulging flexor tendons. These swellings appear to press against the palmar fascia, and hinder further movements of the tendons. Notta has found a thickening of the long flexor tendon in a "trigger-thumb," and attributes the sudden check to the transverse aponeurotic fibres which pass across the sheath over the metacarpo-phalangeal joint. "Trigger-finger" is an obstinate disease, and a great hinderance to work. Passive motion, fixing the finger in splints, shampooing, and electricity, have been tried as remedies. As surgical operations, excision of the tuberosities, tenotomy, and subcutaneous division of the palmar fascia, have been proposed; but none of these measures have proved of permanent benefit.—*The British Medical Journal*, July 4, 1885.

TREATMENT OF ASTHMA WITH PYRIDIN.—Professor Germain Sée has recently communicated to the Paris Academy of Sciences a valuable series of observations on the action of pyridin in the treatment of both neuro-pulmonary and cardiac asthma. Pyridin is a colorless liquid, which evaporates when exposed to the air, and possesses a very penetrating odor. This substance has been discovered by chemical analysis in the products of dry distillation of a variety of organic substances; in such alkaloids as quinine and morphine; and by Wohl and Eulenberg in the products of tobacco-smoke. Various anti-asthmatic cigarettes and burning papers have been found to owe all their virtues to this uniform base, which is developed by the combustion process. The best mode of application consists in evaporating a drachm or more of the liquid in a close room in which the patient sits, for twenty minutes or a half hour, three times daily. Absorption is immediate, as the pyridin appears almost at once in the urine. An almost immediate diminution of the oppression takes place, respiration becomes free, and the heart-beat calm and regular. Immediately after the séance, or an hour later, many experience a tendency to sleep. Usually after the second or third séance the wheezing in the chest disappears. Professor Sée observed the effects of pyridin on fifteen patients, five of whom were affected with heart disease. In all cases decided benefit was noted. In three cases of nervous asthma the attacks disappeared completely after from eight to fifteen days of treatment. The heart cases were immediately and markedly benefited. From these observations the author concludes that all forms of asthma are more benefited during the attack by pyridin than by morphine or any other palliative treatment, but that in the iodides we have the most efficacious curative means.—*Bulletin Gén. de Ther.*, June 30, 1885.

THE CONTAGION OF MUMPS.—The Paris correspondent of the *British Medical Journal*, writes that M. Jaccoud, in a recent clinical lecture at the Hôpital de la Pitié, drew attention to a case of mumps presenting infectious symptoms. The patient entered after the first symptoms had abated. The swelling of the parotid glands had diminished; the right testicle was much swollen and very painful. The temperature was very high, at night reaching 104.2° F.; the subsequent evenings it reached 108.8° F. Endocarditis, affecting both the sigmoid and mitral valves, set in. Dr. Jaccoud regarded this complication as an indication of the infectious character of this case of mumps. Gradually the symptoms disappeared; but the cardiac *bruits* remained, though much enfeebled. M. Netter examined the blood of the patient, and found that it contained microbes. Dr. Jaccoud enumerates the three following symptoms as clinical indications of infection: fever, endocarditis, and transient albuminuria. M. Auguste Ollivier, in a communication to the Académie de Médecine on the contagious character of mumps, stated that the contagious character of this affection can be no longer doubted. MM. Capitan and Charrin have made some researches to ascertain the agent of this contagion, and assert that it is a special micro-organism contained in the

blood and saliva. Inoculations made with it furnished negative results. M. Barth, in a recent thesis, published notes of a serious case of parotiditis in Dr. Bouchard's wards. Microbes were present in his urine and saliva. In the urine and saliva of a male child, aged eleven, suffering from mumps, Dr. Ollivier observed epithelial cells, lymphatic corpuscles, short rods, and micrococci, dispersed in couples or in fours. Zoöglœa were also present, but gentian-violet did not stain them. The urine was highly colored, limpid, free from albumen, and contained a considerable quantity of micrococci, arranged in small masses, two together; rods and bacteria were not so abundant as in the saliva. The saliva of children not suffering from mumps, examined by Dr. Ollivier, was free from rods, but contained micrococci and zoöglœa, which were stained by gentian-violet. In their urine there were neither rods nor micrococci. M. Ollivier afterward examined the saliva and urine of children suffering from parotiditis, and detected the presence of micrococci, diplococci, and zoöglœa.

Extemporaneous Examination of Woman's Milk.—Dr. Hélot, in the *Union Médicale de la Seine Inférieure*, recommends a simple method of determining the quality of human milk. He undoubtedly accords superiority to chemical analysis, but as this process is so long and difficult the common practice has been to rely upon the appearance of the milk. Dr. Hélot's method consists in comparing the number of drops in a given volume of distilled water at 60° F. with those of the same volume of milk. Good milk, such as produces a mean increase of an ounce per day in the child's weight, gives thirty-five drops in the same volume which, of water, gives but thirty. If the milk be of superior quality the volume may yield as high as thirty-eight drops. If, on the contrary, but thirty-three or less are obtained, the milk should be mistrusted. Both breasts should be examined while the nursing is going on.

Diaphoretic Treatment of Puerperal Eclampsia by Hot Baths.—Dr. Breus reports (*Archiv für Gynäkolog.*, xxi. i.) eleven cases of puerperal eclampsia treated by the hot bath, with ten recoveries. He had previously treated six cases by this method, losing in this series, likewise, one case. He first places the patient in a bath of 100° F., and gradually increases the temperature from two to four degrees. He then envelops the patient in blankets to excite an abundant diaphoresis. Of these eleven women, four had had convulsions at the commencement of labor, two during gestation, one at the moment of delivery, and four after delivery. The author affirms, from his experience with these seventeen cases, that neither abortions nor hemorrhages are to be feared from the employment of the bath, and that when the presence of albumen in the urine indicates a threatened complication, the bath constitutes an excellent prophylactic means. One of the cases reported was that of a primipara, aged twenty-six, who was attacked with œdema and albuminuria. In the eighth month baths began to be given After taking forty-five, she was successfully delivered of a large and healthy child.

Stammering and Stuttering.—Alex. J. D. D'Orsey writes to the *British Medical Journal*, June 27, 1885, that as much misapprehension exists concerning the above subjects, the following may be of interest: 1. Speech, or articulated voice, depends for its perfect production on vigor of mind, on sound natural organization, and on due training of the vocal and articulating apparatus. 2. Stammering is inability to articulate, marked by slowness, stoppage, hesitation, and indistinctness, but not with repetition; whereas stuttering consists in a painful repetition of the same consonants, often attended by flushing and facial contortions. 3. Stammering and stuttering may sometimes be caused by organic defects, such as cleft palate, harelip, enlarged uvula, inflamed tonsils, etc.; but these impediments are far more frequently due to functional causes, that is, habit, imitation, heredity, etc. Nervousness is often the consequence, or concomitant of stammering, rather than its cause. Organic effects must, of course, be treated medically or surgically, but the subsequent cure belongs to the elocutionist, while functional derangements (wrong action of the voice apparatus) are peculiarly his province. 4. The sooner the curative process begins the greater is the prospect of success. What is easily eradicated at an early age becomes hard to remove at a later period; though at any time of life, alleviation, if not cure, can be assured as the result of perseverance. "He will grow out of it," is a fatal saying. A fair time ought to be given, according to the nature of the case; for "a few lessons" cannot reasonably be expected to undo the mischief of many years; and the teacher is often accused of failure, when the blame is solely attributable to the patient or the parent.

Alkaloids in Urine.—The Paris correspondent of the *Lancet* (July 11, 1885), writes that a short time ago Drs. Bouchard and Poulet, after a series of researches undertaken by them conjointly, announced the existence of alkaloids in normal urine. Dr. A. Villiers has since studied the subject, and, in a paper lately read by him at the Academy of Sciences, has arrived at a different conclusion—that is, that alkaloids exist only in abnormal urine, and that in the normal condition this liquid does not contain any alkaloidic substance; that in the course of a great number of maladies, even those that are slight, alkaloids—the proportions and toxic properties of which are probably very variable—form in certain organs, pass into the current of the circulation, and are eliminated by the kidneys. Between this formation and elimination a struggle takes place; if the elimination is less rapid than the formation, a veritable intoxication supervenes. In this line of argument Dr. Villiers attributes a great number of fatal cases to the existence of lesions of the kidneys, produced either by some extraneous cause or even by the action of the poison on these organs, lesions diminishing their eliminative action. The ingestion of large quantities of water in the organism may, in a great number of cases, facilitate the elimination of alkaloidal substances, and this is probably the real mode of action of the greater part of the ptisans or infusions administered in divers maladies.

Leprosy with Invasion of the Tongue.—Dr. Campana reports the case of a youth, aged fifteen, of leprous parents, who had tubercles and macules of leprosy on the face and legs. The tongue was also involved, the disease there being manifested by little papilliform tumors grouped together in an oval patch the size of a cent, slightly raised and with roughened surface. These little tumors varied in size from that of a lentil to that of a hemp-seed. Some were conical in shape, others rounded, they were red in color, and painless. One of these tumors was removed and examined under the microscope, when numerous bacilli characteristic of leprosy were found.—*Revue Médicale*, June 13, 1885.

Perforating Ulcer of the Hand.—At a recent meeting of the Surgical Society of Paris, M. Terrillon (*Revue Médicale*, June 13, 1885), presented a patient, aged twenty-six, who had on both hands ulcerations surrounded with thickened epidermis resembling exactly perforating ulcer of the foot. The lesions were surrounded with an anæsthetic zone. There could be no doubt of their origin from a central nervous lesion, and the patient also had other symptoms pointing unmistakably to locomotor ataxia. M. Terrillon had also presented a similar case at a previous meeting. M. Trélat recalled an observation previously made by him, of the relation between perforating ulcer and a central nervous lesion, and stated that he has seen the ulcers upon both hands and feet in the same subject, who was ataxic.

HERPES FOLLOWING OPERATIONS ON THE TEETH.—In a paper in the *Journal de Médecine de Paris*, of June 14, 1885, Dr. T. David writes of a form of so-called traumatic herpes which he has observed after operations upon the teeth or with dental caries. The eruption is seen more often in women and young people, and is seated upon the mucous membrane of the gums, lips, or cheek, or upon the skin of the face. It may be confluent or discrete, and may or may not be accompanied with fever. When there is an elevation of temperature, the eruption may be regarded as a local manifestation of hepatic fever determined by the dental irritation. When there is no fever, the herpes is to be regarded as due to nervous troubles excited by the traumatism of pulling or filling a tooth, or by the irritation arising from the carious process. Dental herpes, when accompanied by fever, swelling of the face, and redness of the skin, may lead to a diagnosis of erysipelas. The affection is otherwise of trivial importance, and disappears spontaneously in a few days.

ORCHITIS FOLLOWING CATHETERIZATION.—At a recent meeting of the Société Médico-Pratique, Dr. Barette read an interesting paper upon the different forms of orchitis due to urethral catheterization, of which the following are his conclusions (*Journal de Médecine de Paris*, Nos. 23 and 24, 1885): 1, Patients with stricture or enlarged prostate are the more exposed to inflammation of the testicles after catheterization the older they are and the more vascular is the urethral mucous membrane; 2, the inflammation of testes and epididymus may be simple or suppurative; 3, in all cases the point of departure of the trouble is a lesion at or near the ejaculatory orifices; 4, starting from this point the inflammation seems to advance by way of the lymphatics of the seminal apparatus, and to thus gain the testicle and tunica vaginalis; 5, whether the orchitis shall be simple or suppurating seems to depend in great measure upon the condition, whether normal or otherwise, of the urine, and upon the nature and extent of the pre-existing lesions of the genito-urinary apparatus.

RESORCINE IN THE TREATMENT OF WHOOPING-COUGH.—In a recently published monograph, Dr. Moncorvo, of Rio de Janeiro, reaffirms the opinion, advanced by him in a previous work, that pertussis is a local disease and that it is not primarily an inflammation of the bronchial tubes. Bronchitis may coexist, he admits, with whooping-cough, but when it does so it is to be regarded as a complication, and by no means an essential part of the disease. He further maintains that the affection is apyretic in its course, leaving out of consideration the complications which may occur, and cannot therefore be classed, as it is by some writers, among the fevers of childhood. The writer holds to the view, and it is upon this that his treatment is based, that pertussis is a parasitic disease confined to the larynx, essentially local, and to be combated by local measures. His treatment consists in the application of resorcine, in one or two per cent. solution, to the larynx at intervals varying from two to twelve hours, according to the severity of the case. The first application may cause an apparent aggravation, but improvement soon follows, and in a short time the paroxysms cease. The author insists upon the necessity of using pure resorcine, occurring in silvery-white needles, very soluble in water, possessing but a faint taste, and free from any odor of benzine or creosote. The author reports upward of forty cases in which resorcine was used, in every one of which recovery took place in a very short space of time.

POISONING FROM THE BITE OF A RAT.—M. Millot-Carpentier reported to the Paris Academy of Medicine the case of a young boatman on the Saint-Quentin Canal who was bitten on the hand and lip by a rat. The wounds healed promptly, but fifteen days later symptoms of lymphangitis appeared, but soon went away again without suppuration, and then purpuric spots appeared upon the integument. The latter affection was accompanied by acute anæmia, prostration, muscular atony, and irregular febrile attacks. At the same time there were singular nervous troubles, intense dysphagia, congestion of the face, laryngeal whistling, temporary inability to speak, swallow, or breathe, and a frothing at the mouth. These attacks were attended with an increase of fever, and left the patient in a condition of extreme prostration. Sometimes the attacks were preceded by an aura starting from the cicatrix in the hand and passing up to the throat. A cure followed the employment internally of permanganate of potassium and sulphate of quinine with tonics and a nourishing diet. The author of the communication considered the case to be one of poisoning by an animal virus.—*L'Union Médicale*, June 21, 1885.

EUPHORBIA PILULIFERA IN ASTHMA.—Euphorbia pilulifera is a plant quite common in Brazil, and has recently taken rank with other drugs employed in asthma. Dr. Marset reviews its properties and mode of administration in the *Bulletin Général de Thérapeutique*, March, 1885. The active principle of the plant is soluble in water and dilute alcohol, but only slightly soluble in ether and chloroform. In small doses it kills animals, by arresting the respiratory movements and heart-beat, which, however, are first accelerated under its influence. Its effects are not cumulative. It appears to act directly on the respiratory and cardiac centres, leaving all other organs intact, and seems to be eliminated by the liver. Locally it is without action on the skin or mucous membrane, excepting that of the stomach, which is irritated by it. It produces good results in the attacks of dyspnœa caused by asthma, emphysema, or chronic bronchitis. It should be employed in daily doses equal to not more than fifteen grains of the dry plant, and taken largely diluted, preferably at the beginning of a meal.

BROMIDE OF ZINC.—Dr. Testa has recently published an interesting study on the action of bromide of zinc, to which he appends the following conclusions (*Revista Médica de Sevilla*, June 15, 1885): 1. This remedy in small doses diminishes sensation, and in large doses destroys the power of voluntary motion, leading thus by its double action to complete paralysis. 2. These effects, unless the dose has been very large, gradually diminish and disappear spontaneously. 3. Bromide of zinc arrests the frog's heart in extreme diastole, but this is a late symptom. 4. The action of this drug resembles more that of zinc than of bromide of potassium. 5. The action of the zinc is, however, modified by that of the bromine, since somnolence, which is caused by it, is not an effect of zinc. 6. The remedy acts first upon the peripheral extremity of the sensitive nerves and then upon the spinal nervous centre. 7. That it also acts upon the cerebral centres is evidenced by the somnolence caused by it.

STRYCHNINE IN ACUTE ALCOHOLISM.—Dr. Lardier has long employed strychnine in the treatment of delirium tremens, and regards it as the best remedy which we possess for this condition, as, in fact, a veritable specific. He insists upon the necessity of giving the drug in large doses. In one case he had given granules containing each $\frac{1}{13}$ grain every two hours for several days without any appreciable result. He then increased the number of granules and also administered the drug hypodermatically, giving in all $1\frac{2}{3}$ grain in the space of twenty-three hours. The result was a most happy one. The patient soon fell into a refreshing sleep, never exhibiting the slightest symptom of strychnine poisoning.—*Journal de Médecine et de Chirurgie Pratiques*, June, 1885.

TREATMENT OF NASAL POLYPI.—The following powder is recommended by a French writer as oftentimes efficacious in the treatment of polypi of the nasal passages: Morphine hydrochlorate, $1\frac{1}{2}$ grain; powdered cubebs, $2\frac{1}{2}$ drachms. A pinch of the powder to be snuffed up five or six times a day.

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THE PHYSIOLOGICAL ACTION OF HYDROCHINON.

THE recent successful use of hydrochinon as an antipyretic, in St. Luke's Hospital[1] and elsewhere, has led to a fuller study of the physiological action of this new drug. A two per cent. aqueous solution of hydrochinon immediately and permanently stops the active movements of fresh- and salt-water amœba, of animalculæ, and of a great variety of bacteria. The common rod-shaped bacteria of urine are to some extent affected, but their movements and reproduction do not cease entirely. Fresh urine to which a two per cent. solution has been added in equal bulk does not ferment so rapidly as it otherwise would. Bacteria do, however, develop in it, and in a few days a bright-green fungus appears upon the surface, while the urine becomes dark-red, owing to oxidation of the hydrochinon. Five minims of a two per cent. solution of hydrochinon injected into the aorta of a decapitated land-tortoise produce in three or four seconds violent convulsive movements and tremors of the entire body. These movements are irregular and very rapid, and they affect different groups of muscles successively.

A piece of fresh muscle moistened with the solution shows increased irritability. The heart beats regularly at first; subsequently the rhythm is disturbed; the force of the systole is increased, and its duration is prolonged.

In the rabbit a few drops of a two per cent. aqueous solution, placed in the eye, causes irritation and hyperæmia, with slight swelling of the conjunctiva. This effect is, however, very transient. A drachm of the two per cent. solution may be swallowed without effect, but .25 gramme, given hypodermatically (in hot water) to a rabbit weighing seven hundred and seventy-five grammes, causes a series of interesting symptoms. In from two to five minutes the animal becomes much excited and restless, its ears, lips, and alæ nasæ twitch violently, the respirations become very rapid, and in eight or ten minutes the fore-legs, and subsequently the hind-legs, exhibit violent clonic spasms. The animal tries to walk, but its efforts end in a sprawl.

The eyelids and lips, and, in fact, all the muscles of the body, are violently affected; the teeth chatter, and the saliva is considerably, the tears slightly, increased; the bowels move frequently, and there may be micturition; priapism also occurs.

No longer able to stand, the animal falls upon the side and vainly kicks in the air. Slight opisthotonos may occur, but the muscles do not pass into tonic spasm until just before death. Cutaneous sensibility is not diminished, and reflexes appear increased. Capillary congestion and heat of the ears is mentioned by Brieger,[1] but is not always observed. The clonic spasms having lasted an hour and a half, the animal suddenly recovers completely, though it is naturally weak for an hour or so longer. No after-effects are noticeable, and no abscess follows the injection. The convulsions are of spinal origin, as they take place in a decapitated animal.

During the active convulsive movements the temperature rises to 104.5° to 105° in the rectum. This is not of much moment in the rabbit, whose normal rectal temperature is about 101° F. Mental excitement, movement, or defecation readily affect this temperature by several degrees. The pulse remains full, regular, and very rapid throughout.

If a larger dose be given, say .5 gramme, to a rabbit weighing nine hundred grammes, the symptoms are the same, but death occurs in a tonic convulsion (opisthotonos) in about ten or twelve minutes. The pupils appear dilated at first, they react normally, and just before death contract somewhat. The heart continues beating for some time after the animal has ceased to breathe, but the action is labored, and when removed from the body it ceases to beat sooner than usual. Rigor mortis occurs at once, and is well marked. The blood coagulates promptly; the cerebral meninges do not appear congested, nor do the lungs; the kidneys are hyperæmic, and the mesentery is congested; peristaltic movement is enhanced, and it persists with greater activity than usual after death in both stomach and intestines. Other organs are normal.

Hydrochinon occurs in grayish-white acicular crystals, having a slightly bitter taste, and a neutral reaction. It is moderately soluble in cold water, readily soluble in hot water, alcohol, ether, and in acid solutions. The usual adult dose, as an antipyretic, is fifteen to twenty grains, best given in alcohol. Forty grains have been taken without disagreeable effects. Hydrochinon is at present somewhat dearer than quinine. Thus far only two writers have reported their clinical experience with the drug, but their results have been so encouraging that much benefit may be expected from its further employment.

Dr. Kinnicutt's cases were fully reported in the RECORD (loc. cit.). The other article, by Seifert, occurs in the *Berl. Klin. Woch.*, No. 29, 1884. Seifert used hydrochinon with benefit in fifteen cases of typhoid fever, and in twenty-three other cases of severe fever of various types.

[1] Hydrochinon, a New Antipyretic, by Francis P. Kinnicutt, MEDICAL RECORD, May 30, 1885.

[1] L. Brieger: Dihydroxybenzol; Archiv für Anat. u. Physiol., 1879, supplementband, p. 67.

DANGERS OF MEDICAL SPECIALISM.

UNDER this title, Dr. H. B. Donkin writes, in the *Fortnightly Review* for July, an interesting reply to Dr. Morell Mackenzie's contribution to the preceding number of the same journal. This latter article, it will be recollected, we noticed editorially some time since. The tone of Dr. Donkin's reply is forcible and dignified,

though at times sarcastic, and in one or two instances decidedly caustic. He goes all over his opponent's ground, and controverts him at nearly every essential point. He says: "The real object of his (Dr. Mackenzie's) attack is the main body of the medical profession, with the Royal College of Physicians in the fore-front of the opposing ranks," and he denies that there has ever been any overt opposition to specialism in the wide sense of devotion of special attention to certain subjects.

According to Dr. Mackenzie, specialism is the "concentration of a man's best powers on a single object." "He may," says Dr. Donkin, "for object read 'organ,' and if his premises apply to medical practice at large, as well as to the occupations he cites as analogous, it must be shown that the whole territory of medicine can be subdivided, without injury to its cultivation, into small and separate fields; but it is equally clear to those who, without technical knowledge, even for a moment seriously contemplate that territory—the human body—that no such division can take place. . . . The body is an organism, not a mechanism; it cannot be studied piecemeal, . . . and he who has the widest knowledge of that body, and of its diseases and its disorders, is best able to find out what is the matter with his patients, and consequently (with certain exceptions) to tend to help them toward recovery."

Dr. Donkin then proceeds to sketch what would be the state of affairs if such a division of labor should occur as would logically result from the carrying out of his opponent's principles. Suppose, he reasons, all physicians were specialists, all high-minded men, each careful not to intrude upon the province of the other. A patient comes complaining of heart-trouble: now, we know that some of the gravest cardiac maladies often exist without any premonitory symptoms, while a slight physiological disturbance may cause very grave ones; furthermore, that often the brunt of the trouble is borne by some organ remote from the heart: to whom, he asks, are such patients to go? which specialist can claim them as his legitimate clientèle? "Surely," he adds, with a side-thrust at his opponent, "the heart is at least as worthy an 'object' as the larynx," and he drives the blade home by continuing: "Laryngology offers, from the facility it gives of actually seeing a part of the body beyond the patient's own ken, a strong temptation to those who are not immaculate to fabulate when they do not find disease."

Dr. Donkin does not regard popular sentiment in regard to specialism, particularly in America, as either a safe or reliable guide to a true estimate of its worth. Nor does he regard Dr. Mackenzie's analogies between the medical and the other professions as holding. According to him, sanitary engineers and electrical engineers (alluding to one of his opponent's analogies) have simply two things in common—a mere part of a name, and the fact that their respective sciences deal with material things which can be seen, felt, and calculated with generally mathematical exactness. Not so, however, with the human body, that variable factor with which the physician has to deal. The specialist has already branched out from his logically legitimate field, and "'Diseases of the Throat' now include almost every affection, be it local or general, accidental or acquired, which affects a gratuitously limited area between the level of the chin and breastbone."

Diagnosis he regards as the great point of the whole matter. If that is accurate, we shall nearly always harmonize in the matter of treatment. Such accuracy is in direct proportion to the wideness of our knowledge and experience. Finally, he partially begs the whole argument by saying: "It is clear to all who know anything of clinical medicine and pathology, that the men who pay special attention to special organs of the body are not those best qualified to investigate or to treat even those diseases that are assumed to belong to those special organs which but rarely suffer alone, or still less to throw light on indefinite or obscure cases."

There is considerable animus in both the papers above alluded to. Here in America we are not attempting to solve the problem of specialism on purely theoretical grounds, but are letting the matter take care of itself, with, on the whole, fairly creditable results. Specialists have appeared in proportion to the demand for them. We believe that every practitioner should know enough about the pathology of special organs to know when special measures are demanded—in other words, when to invoke the aid of the specialist. Furthermore, we believe, and experience has shown, that the successful specialists of to-day are those who have laid a broad foundation in years of general practice, and who, while speaking one dialect, as it were, of the language of medicine, are yet to a creditable extent conversant with the entire tongue.

ACCURATE TEST-TYPES.

AN interesting paper concerning test-types was read by Dr. W. S. Dennett at the Ophthalmological Society, which met at New London, last month. Attention was called to the fact that the test type ordinarily in use was inaccurate for the purpose of testing visual acuteness. Of the ten or dozen letters of equal height composing a line on the test-card in general use, some with an emmetropic eye can be seen clearly at half the distance of others. Oculists up to the present time have been testing eyes at a fixed distance, not understanding the *distance value*, so to speak, of each of the letters. This has been determined by Dr. Dennett after a series of experiments performed in the following manner: The light was excluded from a bowling alley except that given by Edison lamps, whose illumination was so arranged as to give an equivalent of one candle power at a distance of ten centimetres from the type. The letters were made of India ink on white paper. Each letter was properly arranged and the observer slowly advanced to the place where he could distinguish it from one or two of those that it most resembled, and with which it was most likely to be confused. This plan was found to work better than exploring all the letters at once. The result was A, L, U, V, and I were always seen at the greatest distance, and B and S at the least.

As a result of these experiments Dr. Dennett exhibited to the Society a test card on which were displayed letters of a size made in accordance with mathematical laws, to give them all a uniform value.

It is not a little singular that it should have been left until to-day to make the demonstration of the inaccuracies

of a test which has been constantly employed by oculists for twenty years.

It may be remarked that many who make the eye a specialty have recognized the fact that some letters of the same size are much more easily distinguished by patients than others, but Dr. Dennett has discovered the true scientific reason and has placed the matter on a basis of physics and accuracy.

DISPENSARIES—THEIR USE AND THEIR ABUSE.

From time to time there appear in The Record and other medical journals complaints in regard to the abuse of medical charity in New York, and questions as to how it can be regulated. Every physician with a dispensary practice recognizes the fact that many people who could pay a doctor receive medical advice free. It requires but little experience to diagnosticate "the dispensary tramps." They are of every sex and age, and have made the rounds of almost all the dispensaries.

They become connoisseurs of doctors and their methods of treatment. Some of them are very much puffed up with pride if their ailments have been such as to draw the attention to them of distinguished members of the profession, and to have brought them forward in college clinics.

The patients are not the ones to blame for the existing state of free medical services. It is the physicians who attend the clinics, most of whom are professors, instructors, or assistants at clinics held at the colleges or post-graduate institutions. To them patients who will well illustrate diseases dwelt upon by lecturers in the various departments are at a premium. Patients are sought after with eagerness, and devices resorted to to secure them. It is often a matter of how to induce people to come to the clinics rather than how to make them stay away.

Dispensaries, too, are multiplied every year. Once started, the managers desire to make them successful. Success is measured by numbers. Every inducement is offered to the moderately poor in the city to avail themselves of free medical services.

Therefore, if there is to be a reform in this matter, the doctors must give up wishing to hold large clinics—wishing to display to their followings of graduates and undergraduates a variety of cases. Strict inquiry into the circumstances of the patients who apply for aid will do this. Some it will drive away from the clinics to give up all notion of doctoring; others it will send to the physicians who depend upon this class for the small fees which enable them to obtain a foothold among the numerous struggling practitioners of New York.

ANTI-VACCINATION.

The stubbornness of the British character is well shown in the martyr-like spirit with which the anti-vaccination people persist in their determination not to submit to this preventive to contagion from small-pox.

The *Lancet* reports that small-pox is spreading in a very serious way through London and other neighboring cities, and that it is due largely to this unwillingness to be vaccinated.

Occasionally the power of the courts is invoked to compel persons to submit themselves and their families to vaccination, but it frequently happens that the self-opinionated Briton will allow himself to be imprisoned rather than yield. The agitation on the subject goes on vigorously, and there are some educated people who still insist that vaccination is harmful rather than beneficial.

In this country vaccination is generally required, but there is little opposition manifested even when the vaccination has to be done under the direction of the Health officers.

SOME RECENT STATISTICS REGARDING CANCER OF THE TONGUE AND MOUTH.

The report of the Middlesex Hospital, London, for 1883, contains tabulated histories and statistics of 9 cases of cancer of the tongue, 37 cases of cancer of the breast, 41 cases of cancer of the uterus, 2 cases of cancer of the mouth, 8 cases of cancer of the lip, and 6 cases of cancer of rectum and anus, with 18 miscellaneous cancers. This makes a total of 121. Of these the cancers of the tongue (9) and mouth (2) constitute over 12 per cent., a rather larger proportion than the average.

Of the cancers of the tongue eight occurred in men and one in a woman. The cancers of the mouth occurred in men. The age ranged from 35 to 72, eight of the eleven cases being over fifty-one years old.

Very little information is given as to the cause; a history of syphilis was obtained in two cases, and in one of the cases of cancer of the mouth the patient had been a great smoker of a clay pipe. No family history or constitutional taint appears to have existed in any of the cases.

Five of the cases died when in the hospital. In one of these (tongue-cancer) the disease lasted twelve months, there being no operation. A second patient, who had had the disease only four months, died suddenly while under nitrous oxide gas. A third patient, who had been operated on twice, died in thirteen months after the disease first appeared. A fourth patient lived for three years after first noticing some glandular enlargements in the neck. In a fifth case, in which the floor of the mouth, the lower jaw, and the tongue were involved, the patient lived for a little over a year.

Missouri State Board of Health.—Under date of July 25th, the secretary of the Missouri State Board of Health has issued a circular to the public and the local boards of health concerning the use of impure water by the manufacturers of soda and mineral waters. It states that much of the water is obtained from unknown or suspicious sources, and that there is strong probability that disease may be caused by its use. It recommends that dispensers of such liquids ask the manufacturers from whom their stock is obtained to secure a certificate from their local health authorities declaring the sources from which the water used in the manufacture or preparation of their goods are derived to be pure and wholesome.

The services of the members of the New York Pension Board have been dispensed with by orders from the Commissioner of Pensions. The members of the late Board were Drs. S. S. Burt, A. B. Judson, and W. O. McDonald. The new Board has not as yet been formed.

News of the Week.

THE PENNSYLVANIA STATE BOARD OF HEALTH.—The new State Board of Health and Vital Statistics of the Commonwealth of Pennsylvania was organized at Harrisburg, July 2d. Dr. E. W. Gerner, Health Officer of Erie, was elected president, and Dr. Benjamin Lee, of Philadelphia, secretary. The first session was taken up mainly with the discussion and adoption of by-laws. Regular meetings will be held on the Second Wednesdays of May, July, and November. At the July meeting the election of officers will be held. At the November meeting an annual report will be adopted to be presented to the Governor on the first Monday in December, according to law. At the May meeting a public address will be delivered on some sanitary topic. Standing committees were established as follows: Executive Committee, headquarters in Philadelphia, Chairman, Dr. P. Dudley; Committee on Registration and Vital Statistics, Chairman, Dr. J. F. Edwards; Committee on Prevalent Diseases and Supervision of Traffic and Travel, Chairman, Dr. J. F. Edwards; Committee on Water-supply, Drainage, and Topography, Chairman, Rudolph Hering; Committee on Adulteration of Foods, Beverages, and Drugs, Chairman, not named; Committee on Public Institutions and School Hygiene, Chairman, Dr. McClellan; Comittee on Sanitary Legislation, Rules and Regulations, Chairman, Dr. P. Dudley; Committee on Mines, Poisons, Explosives, and other special sources of danger to life or limb, Chairman, Rudolph Hering.

NO MORE FORTUNES IN PILLS.—According to a Philadelphia druggist, within the past three or four years the price of patent medicines has steadily declined, and fortunes are not made so rapidly as formerly out of pills and bitters. This cutting in rates began in Philadelphia, and has gradually extended all over the country. On some medicines the cut was as high as fifty per cent., and the reduction on all patent medicines will average over twenty-five per cent. Formerly a good patent medicine that was properly handled and liberally advertised would make a fortune for its proprietor in a few years. Remedies warranted to cure all the ills that flesh is heir to, and greedily purchased by a credulous public, sold readily at retail at one dollar per bottle and cost little to manufacture. They can now be bought for fifty cents, and the bottom price has not yet been reached. There is no longer any money in patent medicines, either for the druggists or the manufacturers. Prices have been cut so that the margin of profit hardly pays dealers for handling them, and the proprietors complain that the reduction has affected their business also. They claim that their medicines cost to manufacture and put on the market nearly what they are obliged to sell for to the jobbers. There has been a great revolution in the patent medicine business, and no one can tell where it will end.

NEW YORK STATE BOARD OF HEALTH.—This board held a meeting recently at Rochester, Drs. E. M. Moore, J. Savage Delavan, George W. Cooke, Woolsey Johnson, William M. Smith, Alfred Mercer, and A. L. Carroll, the secretary, being present. A financial statement showed an unused balance of $6,750 to the board's credit, an appropriation of $3,000 to carry out the law for the prevention of the adulteration of beer and similar liquors, and an appropriation of $10,000 for the administration of the law to prevent the adulteration of food and drugs, and the use of explosive oils. It was announced that the collection of samples of ales and beers for analysis by the board's chemist had begun. Dr. William Manlius Smith, of the quarantine committee, reported, calling attention to the chances for infection in importing rags. The health officer of the port of New York was directed to make such rules as seemed proper in the emergency, and the board recommended the Federal Government to resume the regulation of such importation. The administration of the law preventing the adulteration of food and drugs was referred to the sanitary committee with power to act. It was recommended that Professors S. A. Lattimore, of Rochester, Willis G. Tucker, of Albany, and E. C. Caldwell, of Ithaca, chemists, be employed as occasion required.

UNIVERSITY OF VERMONT.—Dr. L. M. Bingham, of Burlington, Vt., has been recently appointed Professor of General Surgery in the Medical Department of the University of Vermont.

MR. HART CRITICISED.—The London correspondent of the *Philadelphia Medical Times*, August 8, 1885, expresses his decided dissatisfaction with the behavior of Mr. Ernest Hart, in his double position of editor of the *British Medical Journal*, and Liberal candidate for Parliament. He writes: "They seem to have made up their minds about the Contagious Diseases Acts at the East End. The Mile-End electors have not only made up their own minds, but they have even changed the mind of Mr. Ernest Hart, who pledged himself to vote for the unconditional repeal of the obnoxious measure. For the better understanding of the Contagious Diseases Acts, it may be said briefly that the Contagious Diseases (Human) Act refers to the public women of garrison-towns, who are by its machinery largely prevented from spreading disease by their trading in their persons. Of the good which the Acts have accomplished there is no question, and, next to vaccination, the profession is most solid on the Contagious Diseases Acts. Yet, at the imperative mandate of the radical riff-raff of Mile-End, this prominent member of the medical profession deserts his colors, and goes over to the enemy."

PLYMOUTH'S LATEST EPIDEMIC.—The people of Plymouth, Kingston, and the west side of the river are becoming alarmed over the prevalence of an epidemic of bloody dysentery, which is just now making itself felt. At Plymouth it is particularly bad, and is very virulent and fatal in its results. It is estimated that in Plymouth alone over one hundred persons are lying sick, and several deaths have occurred within the last week from this disease, and many others are in a critical condition. In Plymouth it is said to attack many who are just recovering from the typhoid fever, and in their weakened condition they fall easy victims. It is supposed to be caused by drinking the river-water, which is now largely used throughout the valley. The relatives of those who fell victims to the Plymouth epidemic are making preparations to commence suit against the water company for damages. The truth of the above has been denied.

THE STATE BOARD OF MEDICAL EXAMINERS OF VIRGINIA will meet at the Alleghany Springs (Virginia) on Wednesday, September 16, 1885, at 10 o'clock A.M., for the examination of candidates for the practice of medicine in that State, and for the transaction of such other business as may be brought before it.

DEATH OF DR. J. SAVAGE DELAVAN, OF ALBANY.—Dr. J. Savage Delavan, of Albany, a member of the State Board of Health, and one of the owners of the Delavan House, was drowned in Tupper's Lake, in the Adirondacks, on August 7th. Dr. Delavan was a graduate of the Albany Medical College, pursued special studies in Paris, and afterward became a homœopath. During the war he served with distinction as Assistant Surgeon of the First Connecticut Artillery, and was one of the first pension examining surgeons appointed by the Government. While a resident of Geneva, Switzerland, between 1872 and 1876, he was for a year United States Vice-consul. On the organization of the State Board of Health in 1880, Dr. Delavan became a member, being one of the three commissioners appointed by the Governor. In 1884, upon the expiration of his term, he was reappointed.

THE OWENS COLLEGE PROFESSORSHIP OF ANATOMY.—The competition for the Professorship of Anatomy in the Owens College promises to be an animated one, several candidates of considerable reputation being in the field. Apart from local aspirants to the post, the principal competitor is Dr. W. P. Mears, who is at present in possession of the Chair of Anatomy in Durham University School of Medicine, with which his connection has lasted for over seven years. The value of the professorship at Owens is £700, but as the office of Dean of the Medical School would probably be associated with it, the annual income of the holder would be increased by £150.

HISTOHÆMATIN.—This is the name given by Dr. MacMunn to a class of pigments, or modifications of the same pigments, which are widely distributed in the animal kingdom, and to which myohæmatin belongs. The histohæmatins are respiratory pigments, as can be proved by oxidizing and reducing them in the solid organs. Their bands occupy almost the same place as those of myohæmatin. In the supra-renals of man, cat, and some other animals, the medulla gives the spectrum of hæmochromogen, while the cortex shows that of histohæmatin. Hæmochromogen in a vertebrate body is probably excretory, and must be so regarded here, hence the function of the adrenals must be (at least in a part) to metamorphose effete hæmoglobin or hæmatin into hæmochromogen. An active metabolic process takes place in the adrenals, and Dr. MacMunn concludes that they have a large share in the downward metamorphosis of effete coloring matter, and that his observations will help to throw some light on Addison's disease.

A NEW CONSTITUENT OF THE BLOOD.—Mr. L. C. Wooldridge describes, in the "Proceedings of the Royal Society," his method of obtaining "a new constituent of the blood" which he has lately discovered, and dwells upon its physiological import. The plasma of the blood of a peptonized dog, having been completely freed from all corpuscular elements by means of the centrifuge, is cooled down to zero, when the plasma rapidly becomes turbid, and a decided flocculent precipitate is formed. This is the body which gives rise to the fibrin ferment, and if examined microscopically the precipitate is found to consist of a number of minute transparent bodies, nearly circular in shape, but much smaller than the red corpuscle, and having a great tendency to run together into granular masses. These peculiar bodies may, perhaps, explain the granules, blood-plates, and hæmatoblasts of Osler, Bizzozero, and Hayem.

DEATH OF MILNE-EDWARDS.—Henry Milne-Edwards died at Paris on July 29th. He was born at Bruges in 1800, and studied medicine at Paris. He then devoted himself to natural history, and in 1838 succeeded Cuvier in the Academy of Sciences, and from 1841 he was Professor at the Jardin des Plantes, eventually taking the place of Geoffroy St. Hilaire. He resigned the chair of physiology in 1876, when his son Alphonse was appointed to it. Milne-Edwards was President of the French Scientific Association. The eminent professor was also Grand Officer of the Legion of Honor. His services to science are well known. The "Manual of Zoölogy" is probably the best known of his works in this country, but his most important contributions to scientific literature are contained in the twelve volumes of his "Leçons sur la Physiologie et l'Anatomie Comparée de l'Homme et des Animaux" (1857–1877). He was of English parentage.

THE PALL MALL GAZETTE ENDORSED.—The Committee consisting of the Archbishop of Canterbury, Cardinal Manning, the Bishop of London, Mr. Samuel Morley, M.P., and Mr. R. T. Reid, Q.C., M.P., who have undertaken the investigation of the truth of the statements recently published in the *Pall Mall Gazette* on the subject of the treatment of young girls, has concluded its sittings. They report that, after carefully sifting the evidence of witnesses and the materials before them, and without guaranteeing the accuracy of every particular, they are satisfied that, taken as a whole, the statements in the *Pall Mall Gazette* on this question are substantially true.

THE BERLIN UNIVERSITY INSTITUTE OF PUBLIC MEDICINE is about to be removed to the newly-built morgue. A wing of this building is to be furnished with offices, post-mortem rooms, laboratories, and two lecture-rooms. The Director is Professor Loman, who has held the post since 1864. He is also the town physician and forensic physician of Berlin. His predecessor was Joh. Ludw. Caspar, the well-known medical jurist, who founded the Berlin Institute of Public Medicine.

A BUST OF DR. DE MUSSY.—The Société Médicale des Hôpitaux has opened a subscription toward providing a bust of Dr. Noël Gueneau de Mussy, recently deceased, which is to be placed in the Hôtel Dieu, to which hospital he had been attached for many years.

A PHYSICIAN HONORED.—Dr. Vintras, Senior Physician of the French Hospital, London, has been appointed an Officer of the Legion of Honor.

A SCIENTIFIC CENTENARIAN.—The anniversary of M. Chevreul's birthday was celebrated on August 5th. On July 31st he had reached his one hundredth year.

WHAT IS SAID OF THE PROSPECTS OF THE INTERNATIONAL MEDICAL CONGRESS.—The leading medical journals both at home and abroad continue to speak in unequivocal terms of the deplorable results following the rash action of the new Committee at Chicago. *The New Orleans Medical and Surgical Journal* for August, 1885, says: "Already it is painfully evident that it is simply impossible to organize the American meeting of the International Medical Congress upon the plan adopted by the Chicago committee. Truly, we stand to-day a divided household, and unless some reconciliation can be effected, the failure of the Congress is inevitable. The present situation is deplorable beyond expression. A mighty responsibility rests on the present Committee on Organization. The members must realize the impossibility of organizing the Congress in further pursuance of the policy recently adopted. For the sake of harmony, through which alone the Congress can succeed and the profession escape a national disgrace, the Committee should make concessions to the gentlemen who feel aggrieved by their action; and such concessions to those who have resigned, as well as those who have been displaced, should meet only friendly responses and pledges of harmonious co-operation. We favor the organization of a national committee of peace-makers, composed of representatives from the States and Territories, to be appointed by the presidents of State and Territorial societies; from the District of Columbia, to be appointed by the president of the District society; and from the Army, Navy, and Marine Hospital Service, to be appointed by the ranking medical officer of each service. It is contemplated that a committee, constituted as above suggested, would be very potent in reconciling the differences now existing between the Committee of Arrangements, on the one part, and, on the other, the gentlemen who have been displaced and those who have voluntarily resigned all connection with the organization as now proposed. This committee failing in its purpose, we suggest that it is better to appeal the matter, as it now stands, to the American Medical Association for final adjudication."

The Medical Press, July 29, 1885, writes: "There is something very ludicrous in the attitude of the committee appointed by the American Medical Association, and which on its own authority alone presumed to undo the work already accomplished by the committee specially appointed by the Congress at Copenhagen. The former self-constituted body has deposed the well-known and respected physicians elected by the latter to preside in the various sections, many of whose names are of world-wide renown, and replaced them by a long string of non-entities, scarcely one of whom has ever been heard of outside the village in which he gains a living. The few celebrated physicians who were graciously permitted to retain official posts have naturally and properly shown their disgust by declining to be associated with the strangely mixed representatives of American medical science who are elevated into notoriety by the action of the Association ring; and things are now at such a pass that even the home journals are reckoning up the meeting as certain to be a miserable failure. The more sensible organs, however, are tendering the malcontents a piece of advice which they will do well to act upon; namely, that at their next meeting they should quietly determine their official existence, and resign the organization of the Congress to men of standing in the profession, and who will be able to command confidence and respect on this side the Atlantic. Unless some definite action of this kind is speedily taken, it is a moral certainty that the Congress, if persisted in, will lose every atom of its international character; for no one is going to contribute papers, or be at the expense of reading them to an assembly of mutual admirationists whose meddlesome conceit is scarcely equalled by their obscurity in the world of medicine. We have still, however, sufficient faith in the good sense of our American *confrères* as a whole, to feel assured that the little band of nobodies will speedily be sent to the rightabout, and the direction of the arrangements reassumed by the men who ought never to have resigned the trust reposed in them."

From an editorial in *The Lancet*, August 1, 1885, we quote the following: "We regret to have to inform our readers, that the ill-feeling which has been excited in the United States by the action of the committees appointed to carry out the preliminary arrangements are such as to imperil not only the success of the Congress in 1887, but the very existence of the Congress itself. . . . We cannot discuss the merits of this far from edifying quarrel, but we are too greatly interested in the International Medical Congress not to raise our voice in protest against a state of matters which is both a professional scandal and a serious peril to the continued existence of the Congress. Hitherto it has been considered binding upon all participating in the Congress that medical politics shall be entirely excluded from all its proceedings. But apart from that, we must impress upon our American friends the simple consideration that unless the whole profession in the United States combine cordially in the work of the Congress the meeting in Washington is foredoomed to failure. Party spirit is so alien to the whole spirit of the International Congress, that a large proportion of those who have previously joined in the meetings would certainly, and with justice, refuse to visit the United States to be the guests of a faction. But we have too high an opinion of our Transatlantic friends to believe that this unseemly quarrel, which is disgracing them throughout Europe, will be allowed to continue. We trust that moderating influences will be brought to bear upon both parties, and that, forgetting the past and their own personal predilections, they will cordially unite to promote the success of the meeting in 1887. If, however, the breach now formed is allowed to widen and deepen, it will be the duty of the officers of the Congress in Copenhagen to seek at once an invitation from some country in which the medical profession will not find it impossible to combine for international purposes."

DR. LEROY M. BINGHAM, of Burlington, Vt., has been appointed Professor of Surgery in the University of Vermont, as a successor to Dr. J. L. Little, deceased.

CANINE EXCREMENTS AND PEPTONES.—The *Monthly Journal of Sciences* states, on the authority of a well-informed French contemporary, that the excrements of dogs are now collected in Paris and worked up into peptones and powdered extracts of meat.

Dr. W. W. Jaggard has been elected Professor of Obstetrics in the Chicago Medical College.

Dr. Tilt and Dr. Heywood Smith have been elected Honorary Corresponding Fellows of the Gynecological Society of Boston, U. S. A.

The British General Medical Council a Failure.—Dr. Fothergill writes, in the *Philadelphia Medical Times* of August 8, 1885, that the General Medical Council is a dead failure. Consisting of the representatives of the medical corporations, with a sprinkling of members chosen by the crown, it has disappointed every hope entertained of it, and falsified every prediction of its utility. It is hopeless. It does not even undertake the labor of prosecuting unqualified practitioners, leaving this part of its duty to anyone who will undertake it. The medical corporations do not represent any interests but their own, and no good can come or be expected from them. It is notorious that the much-talked-of Medical Bill has been thwarted by the persistent opposition of the threatened corporations.

The Prize Committee of the Medical Society of the State of New York.—For the information of all interested, the Prize Essay Committee of the Medical Society of the State of New York desires to state that the Society offers a prize of $100, payable out of the Merritt H. Cash Prize Fund, for the best original essay on any medical or surgical subject. The conditions are: That the competitors shall reside in the State of New York; that all essays offered shall be either printed or type-written; that each essay shall be designated by a motto on the title page; that in a sealed envelope attached to the essay shall be placed the name of the writer and the corresponding motto; and that all essays shall be sent to W. W. Potter, Buffalo, N. Y., on or before January 1, 1886.

The Cholera Still Active.—From Marseilles comes the report that at a tumultuous meeting of the municipal authorities there, on August 11th, the sum of one hundred thousand francs was appropriated for sanitary purposes. The cholera panic increases daily. The average of departures from Marseilles by railway alone has already increased 2,000 per day. As an instance of the laxness with which the Marseilles sanitary authorities perform their duties, the case of the captain of an English vessel lying in the port is mentioned. The captain's daughter died of cholera aboard the ship. He at once notified the authorities and requested a disinfection of the vessel. At the time of this report thirty hours had elapsed since the girl's death and yet no official action had been taken concerning the event by the Marseilles authorities. In Spain the cholera mostly prevails in low-lying, damp regions.

Criminal Carelessness.—Some repairs were recently made in the plumbing at Bellevue Hospital. Through the carelessness of one of the workmen, a pipe connecting directly with the sewer was left open in the room of one of the house-surgeons. The latter, unaware of the fact, slept in the room several nights, and was soon stricken down with typhoid fever. He now lies in a critical condition. We think the hospital authorities should institute proceedings against those having the repairs in charge.

Cremation Increasing in Popularity.—The cremation societies are increasing in number, and some of those which are open have their facilities pretty well taxed. The crematory at Lancaster, Penn., is in use very frequently, and there are a large number of bodies lying in vaults awaiting the completion of the one near New York. A society has just been formed at Worcester, Mass., and a bill authorizing the formation of corporations for the purpose of disposing of the dead in this way has passed the Legislature of that State. The recent decision in England that cremation was not illegal has had the effect of creating a number of societies, and one cremation at least has taken place. It certainly appears to be true that this practice is rapidly on the increase, both here and abroad. At a recent sitting of the Corporation of Hamburg, Germany, a motion for permitting cremation in the State of Hamburg, introduced by Dr. Grieschen, was carried unanimously. It is believed that the Senate of the State will give its consent to this resolution.

Reviews and Notices.

Poisons: Their Effects and Detection. A Manual for the Use of Analytical Chemists and Experts. With an Introductory Essay on the Growth of Modern Toxicology. By Alexander Wynter Blyth, M.R.C.S., F.C.S., etc. With Tables and Illustrations. Volume I. New York: William Wood & Co. 1885. Wood's Library of Standard Medical Authors.

The present work, we are informed in the preface, completes an entirely rewritten and greatly enlarged Second Edition of the author's "Practical Chemistry." It constitutes a companion volume to the author's work on Foods. Together they form a noble monument to Mr. Blyth's labor and erudition.

A good many works upon Toxicology have appeared of late years and any new volume must have some especial merit in order to enable it to claim a place among standard works. The present one promises to be the most complete and satisfactory work of its kind which we have yet seen. It should be understood, however, that the author limits his work to poisons alone, and does not take up questions of jurisprudence in connection therewith. The volume before us begins with an extremely interesting chapter on the history of poisons, or rather of the history of the use of poisons, and the gradual development of the science of Toxicology. Part II. takes up the subjects of the definition and classification of poisons, statistics of deaths by poison, and the methods of searching and testing for poisons. The special descriptions begin with Part III., in which the poisonous acids and alkalies are described. Part IV. discusses the volatile poisons, and Part V. concludes the book with descriptions of the alkaloids and other poisonous vegetable principles.

Each particular article is gone over exhaustively, and information is brought down to date. We believe that the general practitioner will find the present work a most valuable one both for reading and reference in the not infrequent emergencies when a thorough toxicological knowledge is needed.

An Excellent Face-Wash consists of a one per cent. solution of boric acid in rose-water, with five per cent. of honey added.

Died of an overdose of reconstruction! A good epitaph for a dead Congress.—*Louisville Medical News.*

Reports of Societies.

THE AMERICAN OPHTHALMOLOGICAL SOCIETY.

Twenty-first Annual Session, held at the Pequot House, New London, Conn., Wednesday and Thursday, July 15 and 16, 1885.

DR. WILLIAM F. NORRIS, OF PHILADELPHIA, PRESIDENT, IN THE CHAIR.

(Continued from p. 167.)

WEDNESDAY, JULY 15TH—FIRST DAY—AFTERNOON SESSION.

DR. S. D. RISLEY, of Philadelphia, read a paper on

HYPERMETROPIC REFRACTION PASSING INTO MYOPIC REFRACTION.

The Doctor had on previous occasions called attention to five cases of a similar kind, and the object of his paper to-day was simply to report six additional cases seen within the past year.

DR. W. S. DENNETT, of New York, made a few remarks on the importance of the examination of spectacles. He exhibited a series of drawings showing the effect of different kinds of lenses on straight lines.

He also exhibited an electric light ophthalmoscope, a description of which has been printed in THE MEDICAL RECORD.

DR. LUCIEN HOWE, of Buffalo, N. Y., exhibited

AN ARRANGEMENT FOR THE DEMONSTRATION OF REFRACTION AND ACCOMMODATION.

This consists of two bands of thin metals bent in such a manner as to represent the outlines of a double convex lens, and passing through it two jointed rods representing the rays of light ordinarily figured as passing through such a lens and joining at its focus. The flexible bands were attached to each other above and below, so that by approaching or separating the sides they could be made to show less or greater convexity. The rods representing the rays of light were jointed near the centre in such a way that while the two halves could be placed in such a direction as to show the light as entering parallel to the axis of the lens, the other two portions could be bent to a point to show the convergence of rays at the focus. By alteration in the position of these rods and also in the forms of the bands representing the lens, all the different variations of the laws of refraction and the changes in accommodation can be demonstrated to a class.

DR. E. DYER, of Newport, R. I., demonstrated a perimeter which he had described at the last meeting of the Society.

A paper on

TWO CASES OF UNILATERAL TEMPORAL HEMIANOPIA

was read by DR. C. S. BULL, of New York.

The first case was that of a man aged sixty-six, first seen in 1884. In 1882 he received an injury which rendered him unconscious. When he regained consciousness found that he was blind in the right eye. In 1883 he noticed a central obscuration of vision in the left eye. There was no syphilis, no disease of the heart, and no indication of Bright's disease. He had never used alcohol to excess, but smoked and chewed tobacco in large amounts. There was an irregular central scotoma. The media were transparent and the iris normal. Both optic disks were of a dirty-white color, and in both there was a deep excavation with pulsating veins, and in the left eye there was a large retinal hemorrhage. The tension was normal.

The second case occurred in a man aged sixty. He had been knocked down by a horse, receiving a depressed fracture of the frontal bone above the left eye. The patient was unconscious or delirious for four weeks following the accident. When he regained consciousness he found that the left eye was blind. Examination showed that in the left eye there was somewhat irregular temporal hemianopsia. This may have resulted from fracture of the superior orbital plate, with injury to the fibres of the optic nerve going to the temporal half of the retina.

DR. H. DERBY, of Boston, read a paper on

TWO CASES OF PENETRATION OF THE EYEBALL WITH SCISSORS, IN THE OPERATION FOR STRABISMUS.

The first case was that of a young man on whom an operation for strabismus had been attempted. The surgeon inadvertently picked up a pair of sharp-pointed scissors. The point of the scissors suddenly penetrated the eyeball, and a portion of vitreous equal in size to a cherry-stone escaped. The operation was abandoned, and Dr. Derby was called to see the case. The eye was bandaged and the patient put to bed. Several attacks of inflammation supervened, but the patient was discharged on the forty-first day with V. $= \frac{7}{10}$.

In the second case the scissors also entered the sclerotic, but after a somewhat tedious convalescence the wound was found closed on the twenty-first day with vision as good as before the operation.

DR. KNAPP stated that he had done three thousand squint operations, and in three cases he had punctured the sclerotic. He, however, completed the division of the muscle, and the patients recovered as readily as from an uncomplicated operation.

DR. MITTENDORF stated that he had been present at a strabismus operation where the sclera was opened. He advised the surgeon to complete the operation. This was done and the wound had healed in four or five days. He thought that, in case the accident happened, the division of the muscle should be completed.

DR. E. WILLIAMS, of Cincinnati, reported a case in which he had punctured the eye. The patient recovered without difficulty.

DR. E. E. HOLT, of Portland, Me., read a paper on

STRABISMUS; ITS CORRECTION WHEN EXCESSIVE AND IN HIGH DEGREES OF AMBLYOPIA.

The writer had employed advancement of the weakened attenuated muscle in connection with tenotomy in certain cases of squint, and after tenotomy alone had failed to correct the deviation. He also exhibited an apparatus he had devised for showing the associated and accommodative movements of the eyes and the effects of tenotomy and advancement of the muscle in correcting squint.

DR. KIPP at one time employed advancement, but he had given it up because it was difficult to graduate the result.

A paper on

THE TREATMENT OF STRABISMUS INTERNUS

was read by DR. W. W. SEELY, of Cincinnati, in which the author said that each year with its added experience had strengthened the conviction that early operations (up to the tenth or fifteenth year) are questionable and possibly should be entirely abandoned. He combated the idea that crossed-eyes never become straight without an operation. Nothing is better established than the relation between ametropia and strabismus; and all recognize the necessity for glasses to prevent the recurrence of the squint after tenotomy. Everyone knows that it is possible to correct the squint by setting aside the ametropia by means of glasses.

The author's early conviction that something should be left to time and glasses has long since grown into an absolute law of action, for he had become thoroughly persuaded that immediate perfection meant later in life insufficiency or even divergence. Operative procedures should not be the first consideration, but should be looked

on as an adjuvant to be resorted to later on if necessary. He summed up as follows: 1. That, with our present light, routine operative interference is wrong. 2. That to thoroughly correct the deviation in young children by operative interference is extremely liable to subject them in after life to insufficiency or external squint. 3. That a later period of life if anything favors better results from operative interference.

Dr. Knapp thought advancement a dangerous operation. He had always been able to correct the deviation by two or three tenotomies, and, if necessary, stitching the eye to the commissure.

Dr. Theobald, of Baltimore, endorsed Dr. Knapp's views in reference to advancement. He was surprised at the conclusions of Dr. Seely. Squint operations in his hands had been very satisfactory. If postponed, they are likely to prove unsatisfactory on account of the amblyopia which is liable to develop.

Dr. O. F. Wadsworth had studied the subject for a long time, and had convinced himself that amblyopia from squint did not occur. The ability of the patient to use the vision which he has does seem to be lost by a continuance of the squint, but it may be recovered by practice. If the examination of vision was carefully made, he was certain that it would be found that the vision was not improved after the operation. It, however, is often difficult to get the full amount of vision which a squinting eye possesses.

Dr. R. H. Derby, of New York, read a paper on

ECTROPION OF BOTH LIDS—BLEPHAROPLASTY BY THE ITALIAN METHOD.

The displacement of the lids was the result of cicatricial tissue from a severe and extensive burn of the face. The lids were loosened from these attachments and the new lids formed from flaps raised from the arm. The arm was bound to the head with water-glass plaster, and the pedicle was not divided until union had taken place. Photographs were exhibited showing the appearance of the patient before and after the operation.

Dr. Hasket Derby exhibited a box of trial lenses, made by Nachet, in which the following features were embodied: 1, The doubling of the prisms; 2, the distinguishing of the cylindrical lenses by coloring the positive settings black and the negative red; 3, the adaptation of the trial frames to receive the glasses without removal from the patient's head; 4, the removal of the handles from the prisms and cylindrics.

A paper on

PLASTIC OPERATIONS WITHOUT PEDICLES

was read by Dr. B. Joy Jeffries, of Boston.

The object of the paper was to make one or two suggestions which the author had not yet put in practice, but which he was ready to try when opportunity offered. He suggested the use of the prepuce from the circumcision of Jewish children for operations about the eyes. He also suggested that in plastic operations the desired result might be obtained without the use of a flap by employing carbolized-oil dressings to retard healing, for it is well known that some time after a plastic operation the transplanted tissue has almost entirely disappeared.

Adjourned until evening.

WEDNESDAY, JULY 15TH—FIRST DAY—EVENING SESSION.

Dr. Harlan, of Philadelphia, reported

TWO CASES OF CONGENITAL PARESIS OF THE EXTERNAL RECTUS.

Dr. Harlan also exhibited and described Borck's sphero-cylindrical lenses.

THE REMOVAL OF A BIT OF STEEL FROM THE LENS WITH THE ELECTRO-MAGNET

was the title of a paper by Dr. J. L. Minor, of New York.

M. S—— was struck, one week before coming under observation, by a piece of steel. There was a small scar in the cornea, and vision was much reduced. There was clearly a piece of steel in the lens, which the doctor desired to remove at once. After consultation, it was thought advisable to await the development of some symptoms. The patient was, therefore, given atropine, and instructed to return if the eye gave any trouble. Some time later the eye became irritable. There was considerable ciliary injection. There was haziness, and the tension was increased. Cocaine was employed and iridectomy performed. The shank of a strabismus-hook was touched to an electro-magnet, thus making it a magnet. The extremity of the hook was then carried into the lens, and the piece of steel at once attached itself to it and was removed. Thirteen days later the eye had recovered from the operation. The lens has not yet been removed.

Dr. R. H. Derby, of New York, reported a case of

MALFORMATION OF THE UPPER LID.

In this case there was a fissure of the upper lid, from the angle of which a portion of skin projected in a peculiar manner.

REMOVAL OF EPITHELIOMA OF THE EYELID BY APPLICATIONS OF BENZOLE AND CALOMEL,

by Dr. A. Matthewson, of Brooklyn. O. D——, laborer, fifty years of age. was seen October 3, 1881, with tumor on the right lower lid. This first appeared as a warty growth three years previously. Of late it had been rapidly growing, and presented a raw granulation surface. Careful examination by an expert showed it to be undoubted epithelioma, It was treated by frequent dustings of calomel, after brushing the surface with benzole. The tumor entirely diappeared until a few months ago, when a granular spot appeared at one edge of the site of the former growth. This disappeared under a renewal of the same treatment.

Dr. H. S. Schell, of Philadelphia, read a paper on

LIPOMATOUS PTOSIS.

Under this head the speaker reported four cases of ptosis from excessive accumulation of fat in the upper lids. The condition occurred in young women between the ages of eighteen and twenty-five. The deformity was symmetrical, the weight of the lid causing it to cover one-half of the cornea. The excessive fat was removed through a horizontal incision. The smallest amount taken away was thirty-five grains; the largest, seventy-one grains. The levator regained power in from one to four weeks. In one case it was necessary to repeat the operation.

Dr. L. Webster Fox, of Philadelphia, reported some

CLINICAL OBSERVATIONS.

Case I.—*Congenital cataract in both eyes successfully operated on in a patient sixty years of age.*—H. H——, negress, aged sixty, presented herself at the Germantown Hospital, February 4, 1884. Congenital cataract of both eyes was found. The use of a four-grain solution of atropia produced no dilatation of the pupils. There was simply light-perception. Shortly afterward the right lens was removed, and the wound rapidly healed. At the end of eight days the patient could see, but could not name objects without touching them. The lens of the left eye was subsequently removed. The effect of the acquisition of sight after sixty years' blindness was carefully described by the doctor. The lenses when removed were found to be of a spheroidal shape. The optic nerve presented an oval outline.

Case II.—*Recovery of useful vision after eighteen years' blindness.*—R. L——, aged thirty-seven years, was injured in the left eye when three years of age. Two years subsequently sympathetic ophthalmia developed in the right eye, resulting in qualitative perception of light only. An iridectomy was done at the Germantown Hospital in June, 1884. The media were found to be clear. When admitted to daylight com-

plained of erythropsia to such an extent that dark glasses were ordered. This disappeared in the course of three months. A + 10 D. spherical glass was ordered for distant use, and a + 14 rendered near objects visible. Subsequent examination showed that better vision was obtained by a combination of spherical and cylindrical lenses.

He also related the history and treatment of five cases of retinitis pigmentosa by electricity (constant current). There was marked improvement, which, in one case, remained nine months after discontinuance of the treatment. Five cells are usually employed, the positive pole being placed over the closed eyelid, and the negative pole at the nape of the neck.

Dr. Lucien Howe, of Buffalo, N. Y., read a paper on

THE PULSATING VARIATIONS OF INTRA-OCULAR TENSION AS MEASURED BY THE MANOMETER.

In calling attention to the variations of intra ocular tension some attention also was given to various forms of manometer, or instruments for its measurement. The earlier forms consisted simply in a U-shaped tube of glass connected by a flexible tube to a trocar. When the trocar was introduced into the anterior chamber of the eye the intra-ocular pressure would tend to force the fluid through the tube and show the degree of pressure by a rise in the opposite column of the U-shaped tube. This was imperfect, for the reason that when the aqueous humor escaped from the eye it was at once in an abnormal condition. The double manometer described by Grasser and Holzke obviated this difficulty. In this, however, there was an imperfection in the trocar, which was rather complicated and liable to get out of order. An improvement was accordingly suggested in having a stopcock attached to a needle of the hypodermic syringe and this the writer found to serve the purpose much better than any other. The animal best adapted to this class of experiments is the cat, on account of the deep anterior chamber.

In the earlier experiments with the manometer, it was noticed that the intra-ocular tension varied with the heart's action. In addition to this the writer called attention to the fact that these variations in the pressure, as indicated by the manometer correspond to pulsations which can be seen with the ophthalmoscope in the vessels in the interior of the animal's eye. In other words, if the same thing holds in the human subject we must infer that when pulsation is seen in the interior of the eye there is also a variation of intra-ocular tension, although not enough to be detected by the touch or by an ordinary instrument. This connection between pulsation and pressure is a demonstration of the cause of venous pulse in the eye as explained by Donders. It was also observed that after the introduction of the needle there was at first considerable pulsation, but after a short time this ceased, the eye evidently adjusting itself to the unusual condition. The experiments referred to were made in the laboratory of Professor Zunt, of Berlin.

Dr. H. Knapp, of New York, reported nine successive cases in which the electro-magnet was used for the extraction of chips of iron from the interior of the eye. These cases were operated on during the past three and a half years. In two the chip of iron was located in the iris, in one for two days, causing inflammation, and in the other for seventeen years, remaining quiet until recently. Both were successfully removed without deterioration of the eye.

In the seven remaining cases the foreign body was in the vitreous, had produced cataract and could not be seen. In three cases the atttempt to extract them with the magnet failed and the eyes had to be enucleated. In four cases the chips of iron were brought forth at the first, second, or third introduction of the tip of the magnet. In all these four cases, the recovery was smooth. All four are still cataractous. In two the form, size, and tension of the globe is not changed and the perception of light is good over the whole field. In the two others the globe is slightly smaller and softer and the field of vision defective, corresponding to the wound made for the extraction of the foreign body. There was no irritation in any of the four eyes as long as they were under observation.

Dr. H. Knapp, of New York, also read a paper on

THE ACTUAL CAUTERY IN DESTRUCTIVE CORNEAL PROCESSES.

The Doctor cited a number of cases in which its use had been of service and considered it a valuable measure.

Dr. Howe had employed this measure in three cases and the corneal ulcer had been somewhat lessened.

Dr. E. Williams, of Cincinnati, had for the past fifteen years been in the habit of treating phlyctenular ulcers of the cornea by the application of pure carbolic acid and had found it to act admirably.

Dr. O. F. Wadsworth, had for several years been in the habit of using carbolic acid for ulcus cornea serpens and for sluggish, painful infiltrations of the cornea. In sluggish infiltration the application is preceded by scraping and in some cases the simple scraping had been sufficient. When the ulcus cornea serpens had been severe, he did not recall that it had entirely stopped the process. In a recent case in which the acid was applied at the beginning of the affection, three applications checked the disease.

Adjourned to Thursday morning.

Thursday, July 16th—Second Day—Morning Session.

Dr. W. F. Mittendorf, of New York, read a paper on

PNEUMOPHTHALMOS, OR AIR IN THE VITREOUS HUMOR.

The entrance of air into the interior of the eye will occur at times during an operation, as, for instance, a cataract extraction. In such cases the air may get into the anterior chamber, whence it can be removed with ease. It is, however, entirely different when air gets into the vitreous chamber. Fortunately this accident is of such rare occurrence that so far no description of it has been given. The writer had seen two cases of this kind within the last two years. Both occurred in connection with injuries caused by the entrance of foreign bodies into the interior of the eye. Such accidents are usually so serious that any complication of them becomes a matter of great interest. The first case was that of a young blacksmith who was wounded by a piece of iron penetrating the sclera and lodging in the vitreous humor. The foreign body, surrounded by a clot of blood, was found at the bottom of the eye. Behind the lens and a little above it three air-bubbles were seen by means of the ophthalmoscope. These appeared to be of the size of a small pea, the smallest about as large as a rape-seed. They closely resembled the air-bubble as seen under the microscope, their centres being bright and the outlines well defined and surrounded by a sharp black border. Their recognition was not difficult. The foreign body could not be removed with the magnet, and it was decided to allow it to remain. The eye was carefully bandaged and the day following it was found that the air-bubbles had united and located at the posterior pole of the lens, the patient having remained quietly on his back some time before the examination. While he was in the upright position the air began to rise slowly until it reached the upper part of the vitreous chamber. During this trip the bubble looked oval and decidedly pointed at its lower portion, resembling oil-globules as they are seen ascending in water. Forty-eight hours after the accident every trace of the air-bubbles had disappeared.

The second case reported was the result of a drilling accident. A pretty large piece of stone or iron had perforated the sclera at the lower and outer part of the

eye. In the semi-transparent vitreous an air-bubble of the size of a hemp-seed could be seen distinctly.

In order to determine the exact appearance of air in the vitreous, the writer experimented upon rabbits' eyes. Four of them had air introduced into the vitreous humor by means of a hypodermic syringe, and four were subjected to the introduction of oil, also by means of the hypodermic syringe. Nearly all these experiments were successful. The difference between the air- and the oil-bubble was so marked that they could be readily diagnosed by means of the ophthalmoscope. The latter were more highly refractive, heavier in appearance, and the contour decidedly darker than the air-bubbles, which were entirely colorless.

The conclusions reached by the author were as follows: 1. The entrance of air into the vitreous body can occur only after a part of the contents of the vitreous chamber has escaped. 2. It is favored by the entrance of a foreign body which makes a large, gaping, irregular wound of the sclera. 3. In order to allow air to enter the vitreous humor, this must either be quite fluid or its anatomical arrangement must have been disturbed by the entrance of a foreign body, or the air must have been attached to the foreign body and be thus carried with it into the eye. 4. The air in the vitreous humor appears like an air-bubble as seen under the microscope, it is more or less round, highly refractive in the centre, and has a sharply defined black outline. 5. Oil-globules in the vitreous present a similar appearance, but they look heavier, are not perfectly colorless, and their outlines are darker; they are also more glittering in the centre. 6. Air-bubbles will be completely absorbed within two or three days. Their presence is not a source of great danger to the eye. Oil-globules last longer, but they are likewise non-irritating.

Dr. Myles Standish, of Boston, reported

A CASE OF TUBERCLE OF THE IRIS.

The history was as follows: A girl, fourteen years of age, both of whose parents were living and had never presented any evidences of syphilitic or tuberculous disease. There was no suspicion of specific taint. During the past winter intense pain in the epigastrium and ascites had been noted. Acute hepatitis was the diagnosis reached by the family physician. No pulmonary lesion was detected.

The eye trouble had existed for four weeks when seen by the speaker. There had not been much pain or photophobia. The iris was attached by its pupillary margin to the capsule, and on it there was a growth, two millimetres in diameter, pink in color. This projected from the iris near its ciliary border.

In the course of a month the eye was enucleated on account of increase in size of the growth and the appearance of other growths.

The vitreous, retina, and choroid were found to be normal. The lens was somewhat opaque. The iris was very adherent to the capsule of the lens along its pupillary border and also beneath the entire area of the principal growth. The largest mass sprang from the surface of the iris near its ciliary border, and at its base was 2.5 mm. in diameter and it was 2 mm. in height. At the top its diameter was 4 mm. This was apparently due to the pressure of the growth against the cornea. There were three other growths, but none of them involved the ciliary body or even the ciliary border of the iris.

Under the microscope the evidences of tubercle were quite distinct, giant cells and bacilli tuberculosis being found.

Dr. Knapp had seen growths presenting exactly the same appearance which had disappeared under the use of specific treatment with mercury even where there was no evidence of syphilis. He had never felt warranted in making the diagnosis of tubercle in such cases, although the presence of the tubercle bacilli in this case would seem to confirm the diagnosis.

A CASE OF CONGENITAL COLOBOMA OF THE IRIS, CHOROID, ETC.,

was reported by Dr. C. J. Kipp, of Newark.

The patient was a woman, sixty-nine years of age. She was first seen four years ago. There was at that time no inflammatory symptoms, but a small triangular coloboma of the iris was found exactly in the vertical meridian. The tension was above normal. The patient had never seen with this eye, but it had never given pain. Four years later the patient was again seen, and the eye presented the signs of inflammatory glaucoma. The pain had prevented sleep for many weeks. The eye was enucleated and healed promptly. There was also found a large ectasia of the sclerotic, and over this the choroid and retina were wanting. The ectasia extended close to the optic papule. There was also a deep kettle-shaped excavation of the optic nerve.

A paper on

COLOBOMA OF THE CHOROID ON THE TEMPORAL SIDE

was read by Dr. S. D. Risley, of Philadelphia.

A young physician consulted Dr. Risley for asthenopia. There was a considerable degree of myopia in the left eye. In the right eye vision was much diminished, $\frac{2}{60}$. The ophthalmoscope showed a large hiatus in the choroid on the temporal side, the depth of which was 3 D. There had been no pain. The speaker thought that these cases were comparatively rare.

Dr. Mittendorf had seen several of these excavations in the outward direction. Where the coloboma was so deep he thought that it was probably a coloboma of the optic nerve-sheath with excavation of the nerve. A difference of 4 D. would indicate a greater defect than would correspond to absence of choroid and retina alone.

SEROUS EFFUSION IN THE VITREOUS DUE TO MALARIA.

In a paper on this subject Dr. W. W. Seely, of Cincinnati, considered the occurrence of this complication not infrequent and he reported one case of this affection.

Dr. William F. Norris read a paper entitled

GRAY DEGENERATION OF THE OPTIC NERVE WITH ABNORMAL PATELLAR REFLEX.

After an elaborate review of the literature of the subject the speaker gave the results of his observations in cases where the patellar reflex was increased or diminished. He described three cases of gray degeneration associated with tabes dorsalis which had come under his observation. While he did not hold that this symptom indicated beginning tabes dorsalis, yet it was a danger-signal calling for rest of the brain and cord with attention to improvement of the general condition.

Dr. O. F. Wadsworth, of Boston, reported

A CASE OF DOUBLE OPTIC NEURITIS AND OPHTHALMOPLEGIA FROM LEAD-POISONING COMPLICATED WITH TYPHOID FEVER.

A boy nine years of age had suffered from obscure febrile symptoms for several weeks and movements of the left eye had been observed to be imperfect. When first seen by Dr. Wadsworth there was pronounced optic neuritis in both eyes. The rest of the fundus normal. Vision was much diminished. No lateral movements of left eye could be made and movement downward was impaired. The outward movement of right eye was defective. The probable diagnosis was tumor in the region of the pons. The movements of the eyes became still more impaired and vision sank. The boy developed pretty distinct symptoms of typhoid fever. The spleen and liver were both enlarged. Lead was found in the urine and the diagnosis of tumor was then abandoned. The treatment was with iodide of potassium. The general condition gradually improved. The neuritis passed into atrophy, leaving too little vision to count fingers. The move-

ments of the eyes were completely restored and the lead disappeared from the urine. The cause of the lead-poisoning was found to be the presence of a piece of lead-pipe in the cistern from which the drinking-water was obtained.

Dr. Joseph A. Andrews, of New York, read a paper on

OLIVE OIL AS A MENSTRUUM FOR DISSOLVING COCAINE FOR APPLICATION TO THE EYE.

In addition to the occasional benefit from the use of oil, dropped into the eye in recent abrasions from burns and in other painful affections of the cornea in which atropia is indicated, cocaine may likewise be serviceable. The plan of dissolving the cocaine in oil seems to insure a longer contact of the remedy and a smaller quantity is required to effect anæsthesia, two qualities of especial advantage in operations on the eye.

Neither the salt of cocaine nor of atropia is soluble in olive oil, but the alkaloid of both dissolves readily in the menstruum without the addition of an acid, it being only necessary to expose the solution for a few minutes to a gentle heat in a water-bath. Castor oil is not a desirable menstruum on account of its irritating qualities, and the oleate of cocaine, for the same reason, is still more objectionable as an application to the eye.

A CASE IN WHICH ENUCLEATION OF THE EYE FOR GLAUCOMA HAD PRECIPITATED GLAUCOMA IN THE OTHER EYE

was reported by Dr. David Webster, of New York. The patient was a man aged fifty-four, the subject of glaucoma absolutum. He complained of periodical obscurations of vision in the good eye. V. = $\frac{2}{12}$ and there was no limitation in the visual field. As he was of dissipated habits he was advised to live properly. A week or two later returned, stating that he had had a worse attack. There was an excavation of the nerve in the good eye detected. The glaucomatous eye was now removed. Two days later acute glaucoma appeared. An iridectomy was performed and he recovered in a week or two with V. = $\frac{2}{20}$, with no cupping of the disk and no limitation of the field. This was the only case he knew of in which enucleation had precipitated an attack of acute glaucoma in an eye already predisposed to it. He had, however, reported cases in which iridectomy had produced the same effect.

Dr. E. Williams, of Cincinnati, reported

TWO CASES OF QUININE AMAUROSIS.

In the first case a man took about one ounce in the course of four days. This produced total blindness and deafness, but in six weeks he could see as well as ever; the hearing had never completly returned, although the quinine was taken eight years ago. The field of vision was concentrically contracted in both eyes. The optic disks were very white, the calibre of the arteries and veins was reduced, and the smaller capillaries could not be seen.

The second case was that of a boy, aged fourteen, who had received large doses of quinine, the exact amount not being known. He was totally blind for four days. When examined, the sight was much diminished, and the atrophy of the optic disks was extreme and there was great contraction of the field of vision.

A MEANS OF MEASUREMENT OF THE AMOUNT OF ANÆSTHESIA FROM COCAINE.

Dr. Lucien Howe, of Buffalo, exhibited the drawing of a kymograph which he had used for this purpose. The use of the instrument was based on the fact that irritation of a sensory nerve is followed by a rise of blood-pressure. The instrument is connected with an artery and the conjunctiva is irritated. Cocaine may then be applied and the results on the blood-pressure compared.

Dr. Harlan, of Philadelphia, presented a modified ophthalmoscope which had been devised by Dr. Jackson, of Philadelphia. In it the lenses moved vertically instead of circularly.

Dr. Dennett, of New York, exhibited an arrangement for using Stokes' lens for measuring astigmatism, and to avoid the inconvenience of constantly removing the frame from the patient's nose. The lens was mounted on a stand and could thus be placed in front of the patient.

The Society then went into executive session.

The officers for the following year are:

President—Dr. Wm. F. Norris, of Philadelphia.

Vice-President—Dr. Hasket Derby, of Boston.

Secretary and Treasurer—Dr. O. F. Wadsworth, of Boston.

Corresponding Secretary—Dr. J. S. Prout, of Brooklyn.

New members were elected as follows: Drs. Chas. A. Oliver, of Philadelphia; Edward Jackson, of Philadelphia; B. Alexander Randall, of Philadelphia; D. Pope Walker, of New York; William O. Moore, of New York; Frank G. Capron, of Providence; S. M. Burnett, of Washington; Wm. T. Bacon, of Hartford.

The next meeting will be held at New London, the third Wednesday in July, 1886.

Correspondence.

OUR LONDON LETTER.

(From our Special Correspondent.)

CLOSE OF THE ACADEMICAL YEAR—CHANGES IN THE CURRICULUM—THE TEACHING OF MATERIA MEDICA—PROFESSORS AND TEXT-BOOKS—MEDICAL CANDIDATES FOR PARLIAMENT—MR. WHARTON JONES AND THE PHYSIOLOGISTS.

London, July 25, 1885.

The academical year now closing has witnessed great changes in medical education in London. The entire curriculum has virtually been revolutionized by the establishment of the Conjoint Examining Board for England and Wales. The first step toward sessional examinations has been taken by the establishment of what has long been talked of, viz., a compulsory examination for students at the end of the first year. The first summer examinations under the new scheme are now being held. The wisdom of the new scheme is at any rate open to question, as regards one of the summer subjects, Materia Medica. This subject—using the word in its widest sense—has been cut in two. The therapeutical division of the subject has been relegated to the final examination, leaving the pharmaceutical, chemical, and botanical parts to be digested as best they may A fraction of the paper is devoted to the physiological action of drugs, but the actions and uses of medicines are regarded as being beyond the comprehension of first year's students, who are expected to enliven as best they can the hours devoted literally to the study of the dry leaves of the subject. I am not exaggerating. At the College of Physicians a question has actually been asked about the "Leaves" of the Pharmacopœia.

Under the new arrangement the London teachers of Materia Medica are somewhat in a quandary. One of them, Dr. F. T. Roberts, has boldly announced his intention of devoting his lectures entirely to therapeutics, and has issued a small text-book, devoted entirely to the other divisions of the subject. It is accurate, but dry as the specimens which it describes. Such a book may sell because Dr. Roberts is an examiner, but cannot enhance his reputation. Moreover, there cannot have been a real want for such a book, as Dr. Isambord Owen's little work, issued a year before, covers the same ground, and is more readable.

Another gentleman, who is also an examiner—Dr. Lauder Brunton—meets the difficulty by including all pharmaceutical, botanical, and chemical details in his recently issued book, and protesting in his preface against the importance attached to their study. He quotes with approval the *reductio ad absurdum* suggested by

the late Professor Sharpey—that we might as well require a knowledge of the whole art of cutlery before setting a student to dissect. Dr. Brunton follows this up by remarking that we now oblige a student to learn the physiological action of drugs, a subject about which little was known until recently, and that to require all this *in addition*, is to treat them as Pharaoh treated the Israelites. Coming from an examiner who sets such questions as those now given, this remark is, to say the least, rather unfortunate.

An examination of Dr. Brunton's elaborate work suggests some reflections not wholly favorable. Nearly half of it is devoted to what the author terms "General Pharmacology and Therapeutics," in which the actions of drugs on the various tissues and organs of the body are treated of at great length, and, it must be added, with great learning and ability. The multiplicity of details given throughout the work is bewildering; so are the numerous references to German authorities. The practical doctor who refers to its pages will often, however, be disappointed. He will remember it as a treatise in which nearly a page is devoted to an explanation of the probable mode of action of arsenic in phthisis, but in which, although arsenic is mentioned as useful in diseases of the skin, no one cutaneous affection is named for which it may be given; as one in which the use of sulphur ointment as a remedy for scabies is given, but no details as to how to use it; as one in which the old error of describing citrate of lithia as amorphous and deliquescent is perpetuated; and as one in which it is suggested that iodoform may be employed as a vapor. There are numerous references, but those to British writers are very few and far between, and not always given where they should be in justice. Koch's remarks as to the comparative inertness of carbolized oil are given, but the much earlier original observations of Dr. Sansom are ignored. Similarly, the method of giving aconite in hourly drop doses is incorrectly ascribed to Dr. Ringer, instead of to Dr. Prosser James, who introduced it to the profession before Dr. Ringer was in practice. Dr. John Harley's observations and experiments are not even mentioned under conium, and Dr. Garrod's observations on lithia salts are completely passed over. On the other hand, the book is burdened with the details of the effects of some drugs on birds and mammals, and no inconsiderable amount of toxicology is introduced. Such is our last work on Materia Medica—a book more for the physiologist and the laboratory than for the busy practitioner in daily practice. Much of our vaunted modern medical teaching has the same tendency.

Two more medical men have come forward as parliamentary candidates. Mr. Ernest Hart, the editor of the *British Medical Journal*, has come forward for a constituency in East London. Mr. Erichsen, late President of the English College of Surgeons, has appeared as a candidate for the Universities of Edinburgh and St. Andrew's. Mr. Erichsen has already received considerable support, though he has not the advantage of being an alumnus of either university. He is, though, an honorary graduate of the former university.

Mr. Wharton Jones, F.R.S., late Professor of Ophthalmic Medicine and Surgery in University College, London, has been busying himself in his retirement at Ventnor by penning a series of articles which are calculated to make some of our physiologists rub their eyes and ask themselves whether they are asleep or awake. The emigration of leucocytes is now taught as a well-established incontrovertible phenomenon. Mr. Wharton Jones believes that there is no such thing, and says that he has not yet been fortunate enough to meet with any professor who could satisfy his doubts from experience of his own, or demonstrate the fact to him. The suggestion is made that the belief of "hundreds of trained workers" in the phenomenon may be a mere parrot utterance. Those, he says, of whom he has made inquiry acknowledged that they had not observed the phenomenon. Mr. Wharton Jones similarly criticises unsparingly many other articles of faith in vascular physiology and pathology, and challenges the production of proofs. The physiologists meanwhile seem in no hurry to take up the gage he has thrown down. Is it because they are conscious of their own weakness, and that, in fact, many of them have not sufficient practical experimental knowledge of the points at issue to contradict Mr. Wharton Jones?

"A MEDICAL VIEW OF ARMY MORALS."

To the Editor of The Medical Record.

Sir: In a communication published in The Medical Record July 11, 1885, exception is taken to a remark attributed to Professor Gross. That this venerable surgeon may have been mistaken in ascribing a specific taint to the scrofulous children of all soldiers is possible, but I do not think it has been shown that he was. Your correspondent supplied facts and figures to repudiate the insinuation, which he declares to be untrue. Let us see with what result. He cites "three hundred and eighty careful and prolonged examinations of soldiers made during the last year," etc.; in only one was positive evidence of "syphilis found, and in five only was there presumptive evidence." The medical statistics of the Provost-Marshal-General's Bureau give the ratio of soldiers examined and rejected for syphilis as 12.8 per thousand, which corresponds very closely with that above, provided the five presumptive cases be included.

Assuming the correctness of this ratio for the present as well as the past, let us take the assertions in the order stated in the communication and see if they are corroborated by the statistics given in those reports. Your correspondent asserts that "the young men today between twenty and thirty-five years of age" will show a much larger proportion with evidences of acquired syphilis. In the words of your correspondent "this is untrue." The reports show for those between twenty and thirty-five years of age a ratio of ten per thousand, the average for soldiers being twelve per thousand. He challenges "any profession in America, not excepting the clergy, college professors, and editors." Even the sanctuary is invaded. *O tempora! O mores!*

But here again the figures show the doctor to be in error. Referring to the same authority, which, be it remembered, was compiled by military officers, we fail to find *any* one profession in which the ratio is so large as in that of the soldier, the ratios being for those professions particularly alluded to in the communication as follows: Editors, 0; teachers, 3; clergymen, 7; and soldiers, 12 per thousand.

The doctor thinks "that American soldiers deserve better treatment at the hands of physicians." How is it with the clergy, college professors, editors, and young men? But I see no ground for assuming the treatment to have been bad. Prophylactic measures might result in some good, but the laws of our land have placed no such powers in the hands of the profession. If "a careful examination of soldiers now living" should give a less proportion affected (?), however gratifying such a result might be, it would not affect the remark made by Professor Gross, which had reference to the past and not the present.

Would it not be better to divest such questions of sentiment and deal with them in the light of modern physiological and sociological laws, recognizing the causes and results, hoping for some improvement in the future, and not forgetting the injunction of that intrepid old lecturer, who was wont to turn upon his hearers, whose faces depicted horror and disgust at these unfortunate patients, and remind them that they should not show their disgust, but rather pity, for if they were fortunate enough to have escaped themselves, it was due more to good luck than any credit on their part?

Yours, Medicus.

Army and Navy News.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from August 2, 1885, to August 7, 1885.

BILL, JOS. H., Major and Surgeon, U.S.A. Died, at Yonkers, N. Y., July 21, 1885.

MCDOUGALL, CHARLES, Lieutenant-Colonel, U.S.A. (retired). Died, at Fairfield, Va., July 25, 1885.

DEWITT, CALVIN, Captain and Assistant Surgeon. Promoted to Major and Surgeon, vice Bill, deceased, to take effect from July 21, 1885.

IVES, FRANCIS J. Appointed Assistant Surgeon, with rank of First Lieutenant, to rank as such from July 25, 1885.

GIRARD, A. C., Captain and Assistant Surgeon. From the Department of the East to the Department of Columbia. S. O. 170, A. G. O., July 27, 1885.

EBERT, R. G., Captain and Assistant Surgeon. From the Department of Columbia to the Department of the East. S. O. 170, A. G. O., July 27, 1885.

TESSON, L. S., Captain and Assistant Surgeon. Ordered from Fort Stockton, Tex., to Fort Davis, Tex. S. O. 90, Department of Texas, July 27, 1885.

CARTER, W. F., Captain and Assistant Surgeon. Ordered for duty as Post Surgeon, Fort Stockton, Tex. S. O. 90, Department of Texas, July 27, 1885.

APPEL, A. H., Captain and Assistant Surgeon. Ordered for duty with the United States troops forming portion of guard of honor over remains of ex-President General Grant, at Mount McGregor, N. Y. S. O. 36, Division of the Atlantic, July 29, 1885.

GORGAS, WILLIAM C., Captain and Assistant Surgeon. Granted leave of absence for two months, to take effect about August 10, 1885. S. O. 169, A. G. O., July 25, 1885.

BROWN, J. M., Surgeon; EWEN, CLARENCE, and TAYLOR, A. W., Assistant Surgeons. Ordered to rejoin their proper stations in Department of the Platte. G. O. No. 7, Division of the Missouri, August 1, 1885.

EDIE, G. L., and BLACK, C. S., Assistant Surgeons. Ordered to rejoin their proper stations in the Department of Texas. G. O. No. 7, Division of the Missouri, August 1, 1885.

POWELL, J. L., Captain and Assistant Surgeon. Assigned to temporary duty at Fort Leavenworth, Kas. S. O. 110, Department of the Missouri, July 30, 1885.

DIETZ, WM. D., First Lieutenant and Assistant Surgeon. Ordered from Fort Selden to Fort Stanton, N. M. S. O. 111, Department of the Missouri, July 31, 1885.

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service, for the week ending August 1, 1885.

FESSENDEN, C. S. D., Surgeon. Leave extended ten days on account of sickness. July 27, 1885.

GODFREY, JOHN, Surgeon. Granted leave of absence for thirty days. July 29, 1885.

IRWIN, FAIRFAX, Passed Assistant Surgeon. To proceed to Richmond, Va., and Wilmington, N. C., as inspector. July 28, 1885.

AMES, R. P. M., Passed Assistant Surgeon. Granted leave of absence for thirty days. July 27, 1885.

THE RELATIVE ESTIMATION OF DOGS AND DOCTORS.—In Michigan they assess a dog $1 for being a dog. In Tennessee they assess a man 50 cents to become a doctor. It costs half a dollar more to be a dog in Michigan than a doctor in Tennessee. Don't be a dog.—*Battle Creek (Mich.) Moon.*

Medical Items.

CONTAGIOUS DISEASES—WEEKLY STATEMENT.—Report of cases and deaths from contagious diseases reported to the Sanitary Bureau, Health Department, for the week ending July 25, 1885:

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-spinal Meningitis.	Measles.	Diphtheria.	Small-pox.	Yellow Fever.
Cases.								
Aug. 1, 1885	0	12	46	1	109	70	0	0
Aug. 8, 1885	0	11	31	4	69	50	3	0
Deaths.								
Aug. 1, 1885	0	3	9	1	21	34	0	0
Aug. 8, 1885	0	3	3	4	18	18	0	0

A "FAITH CURE."—At a recent meeting of the Philadelphia Clinical Society, Dr. D. M. Barr related a case of so-called faith-cure which had come under his personal observation. He had first seen the patient, a lady, forty-nine years of age, in January, 1879. She had then been suffering at intervals for several months from severe uterine hemorrhages. Examination revealed a cauliflower excrescence involving the posterior and part of the anterior lip of the os uteri. This was removed by the écraseur, the wound healed kindly, and for two years and a half the patient enjoyed excellent health. At the end of this time she again had uterine hemorrhage, and examination showed the presence of specific granulations covering the entire endometrium. These were destroyed by Vienna paste, and the patient passed another year of apparent health. Hemorrhage recurring again, another examination was made, and the epitheliomatous growth was seen to involve the vagina and the body of the uterus. The patient was greatly alarmed, refused all nourishment, and seemed to be rapidly approaching dissolution. At this juncture she was persuaded to try the faith cure, and after being prayed over and anointed she declared herself cured. And so she was to external appearances; she felt well and strong and was able to endure almost any exertion, and she looked so much better that Dr. Barr did not recognize her when he saw her three months later. She remained in this condition about a year when she began again to fail. She was again examined and the cancer was found to have been increasing steadily; it now filled the pelvic cavity, and the enlarged uterus extended as high as the umbilicus. She died a short time after this. In the discussion which followed this report, Dr. Montgomery related the case of a lady suffering from an organic heart affection who was desirous of trying the faith cure; but the examining physician told her that such cases were not benefited by that method of treatment.

PROLONGED GESTATION.—Dr. A. H. Crawford, of Buffalo, N. Y., relates the following case as one of presumably prolonged gestation: "Mrs. G——, married six years and the mother of two children, had always, except during pregnancy and lactation, been perfectly regular in her menstruation, the periods extending over a week in each calendar month. She menstruated the last time on June 15, 1884, and from that date considered herself to be pregnant. She first felt motion in December, if she remembers correctly, but is certain of having noticed it early in January. The child was not born until June 27, 1885, one year and twelve days from the last menstrual period. The infant was a girl of medium size, with an abundance of hair, but with no other signs of increased development. The mother was a perfectly healthy woman and had no uterine trouble or other condition than pregnancy to account for the cessation of the menses."

A CONTRIBUTION TO HEPATIC SURGERY.— Dr. C. G. Roehr, of Milwaukee, has been experimenting upon dogs and cats with a view of determining how well they would bear the removal of portions of the liver or gall-bladder. After opening the abdominal cavity he ligated a portion of the liver by a continuous double catgut suture drawn so tight as to cut through the hepatic substance while only compressing, but not dividing, the vessels. He then excised the portion lying on the distal side of this suture and closed the external wound antiseptically. The animals survived the operation, and subsequent examination showed the wounded surface of the liver adherent to the omentum and peritoneum. The catgut ligatures had been absorbed. In two cats he operated in a similar manner, excising a portion of the gall-bladder, having previously drawn off the bile. The cats were afterward killed, and the wound in the gall-bladder was found cicatrized, no adhesions being found with the neighboring parts.

ACUTE INFLAMMATION OF THE THYROID GLAND.— Dr. E. B. Ward, of Greensboro, Ala., writes: "I see reported in the last RECORD a case of acute inflammation of the thyroid gland in a Bohemian woman. I would be glad if you will give space in your valuable paper to a report of a similar case occurring in an American woman. The lady had no goitre at all, no enlargement of the neck of any kind previous to this acute swelling; she was over fifty years of age, mother of a large family. She told me when I was called to see her that I was the first doctor she had ever had attend her. Stature was short and full, resembling very much the Swiss or Bohemian. The enlargement when I saw it had attained to considerable size, fully as large as a good-sized cocoanut. She suffered considerable pain at night from it. It did not interfere with deglutition or respiration. Iodine was injected into the tumor, suppuration came on, and when the knife was used to open it the pus shot out like water from an artesian well; at least a teacupful of pus was discharged. The patient convalesced without any more trouble."

COLD HANDS AND FEET.—Many people suffer from this trouble all their lives. They have difficulty in keeping the feet or hands warm in winter, and slight exposure to cold or mental excitement at once asphyxiates the extremities. These people generally suffer also from a palmar and plantar hyperidrosis. They constitute the class out of which the different forms of Raynaud's disease are drawn. Local and general exercise daily, hot pediluvia containing tr. capsici, general tonics, warm absorbing covering to hands and feet, are the therapeutic measures indicated.

RHUS TOXICODENDRON AND RHUS AROMATICA.—A correspondent from Boston writes: "Permit me to call your attention to a paragraph in your issue of July 25th, which you entitle, 'Rhus Toxicodendron in the Treatment of Enuresis.' The text says, 'rhus *aromatica*.' The distinction is not unimportant, as rhus toxicodendron is, as its name implies, poisonous, being the 'poison ivy,' while rhus aromatica is not so. If Dr. Willeford knows anything in favor of rhus toxicodendron (which is officinal), I wish he would say so."

SOME NOTES ON THE DOSAGE AND THERAPEUTIC VALUE OF CONVALLARIA.—Dr. Z. P. Dellenbaugh, of Cleveland, O., writes: "In THE MEDICAL RECORD for June 27, 1885, p. 706, Germain Sée is quoted as giving convallamarine to children in one-third to two-third grain doses. About one year ago McKesson & Robins supplied convallamarine in $\frac{1}{100}$ gr. pills, and cautioned the profession to only gradually increase the dose of one pill. As the discrepancy is very great, would you be kind enough to note in your next issue whether the translator has not confounded the extract of the drug with the alkaloid." Doubtless the aqueous extract was meant instead of the glucoside convallamarine. The alkaloid convallarin is inert. The dose of the aqueous extract of the whole plant is from gr. v. to gr. viij. t. i. d. Dr. Dellenbaugh adds: "I have used convallaria quite freely since its introduction to modern practice, and find the infusion, if anything, more efficient as a diuretic in feeble heart cases than digitalis. Though not as pronounced as digitalis in increasing the length of cardiac systole (not diminishing the number of contractions so well as digitalis), convallaria, being so much safer, I have relied on it to maintain the energy obtained by the digitalis, and am quite well pleased with the results."

THE INTERNATIONAL MEDICAL CONGRESS, which is to convene in Washington, D. C., in 1887, it is to be feared will be a flat failure, on account of the questions of medical politics and geography which have been raised by a few gentlemen who are anxious to play the rôle of Atlas to the medical world. Since the action of the committee at Chicago, scores of eminent physicians, whose names shed the brightest lustre on American medicine, living in Philadelphia, Boston, Baltimore, Louisville, and other large cities, have withdrawn and positively refuse to have anything to do with the matter. It now looks as though the Medical Congress will be like the play of Hamlet with Hamlet left out.—*Indiana Medical Journal.*

DEMAGOGUES OF MEDICINE.—One more extract in regard to medical demagogues—a very true picture: On no profession does the demagogue, in the English, not the Greek, sense of the word, inflict more damage than on the medical. Yet in no profession, be the truth plainly spoken, will you find a larger proportion of demagogues. I do not refer to unmatriculated or unlicensed or unregistered malpractitioners. They are an odious class apart. I refer to those in regular though not in good standing. You will find them boasting of their cures. You will find them organizing Cheap John dispensaries. You will find them exaggerating ailments in order to magnify recoveries which Nature would have made more quickly had they been out of the way. You will find them declaring that old and disproved remedies are new and infallible cure-alls. You will find them proclaiming to wide-eared laymen their works of wonder. You will find them with a noisy constituency of half-educated men and wholly silly women championing them as if they were a national issue or an evangel of deliverance. . . . This sort of lying is a form of demagogy. It passes for miracle and gospel among the credulous. It limits a man for his audience to the low associations to which you will be tempted and against which I warn you. It is a compound of Munchausen and Mumbo Jumbo. It works on its claque or victims the awe the German explorer worked on the African savages—who worshiped him, gave him provisions, and free and safe passage, because he could wag his ears and had a startling trick of removing his false teeth.—MR. ST. CLAIR MCKELWAY, in *Gaillard's Medical Journal.*

A VERY YOUNG CASE OF GONORRHŒA.—Dr. E. B. Ward, of Greensboro, Ala., writes: "I would like to ask if any of your many readers can report as young a case of gonorrhœa as this: Patient a negro boy, seven years old, with a specific discharge from the urethra. The patient had contracted the disease from an older girl, who used him for her vile enjoyment. I had another youthful patient, aged nine, last year, but this one 'takes the cake.'"

AN ANTISEPTIC OINTMENT.—Dr. E. B. Ward, of Greensboro, Ala., writes: "The antiseptic ointment mentioned in your last paper by Dr. M. B. Ward is very much like the one I have been using for some time in my practice. The one I use, and which has given splendid results in wounds and sores, is composed of iodoform, subnitrate bismuth, and vaseline. For chronic ulcers I add calomel to this, I have had wounds heal very readily with this ointment."

The Medical Record

A Weekly Journal of Medicine and Surgery

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Original Articles.

PULMONARY PHTHISIS.

BY J. MILNER FOTHERGILL, M.D. EDIN., HON. M. D. RUSH. MED. COLL., ILL.

PHYSICIAN TO THE CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST (VICTORIA PARK).

PULMONARY phthisis is a very common malady, killing a perfect array of victims annually. Yet my experience, covering a period of nearly ten years, at a chest hospital, tells me that it is a malady which is far from being necessarily fatal. Indeed, in the large bulk of cases a rally is made which may lead to recovery. Where the patient is living under fairly favorable circumstances, such, indeed, is quite commonly the case. Unfortunately for hospital patients, they cannot live under favorable circumstances.

It may be well to start with the less grave cases—or where the disease is in an early stage—first. A patient presents himself, or herself, complaining of cough, and looking ill. Perhaps not very ill, but there is something which tells the trained eye that mischief is on foot. There is a certain pallor, with a dirty hue of the skin. Sometimes the skin is distinctly greasy, and then the outlook is darker. On inquiry, the story is pretty much as follows: cough, night-sweats, losing flesh, and a defective appetite. Physical examination tells of a consolidated lung-apex as far as the third rib. Such is the most common out-patient with commencing phthisis. As to the prospect of each patient, much will depend upon the family history. If that be good, there is usually little ground for apprehension. If it be bad, then the case demands watchful care, and even then the result is doubtful.

As to how that lung-consolidation has been brought about, is a matter upon which it is difficult to say anything positive. It is there, and we know it to be due to a development of lowly connective-tissue corpuscles along the tiny blood-vessels. The fewer the corpuscles and the better their quality, the more favorable the prospect; the more profuse the production of them, the lower their quality, the more they crowd on each other, and the more likely is subsequent softening. How are we to distinguish these cases? Largely by the family history and the history of the patient. If it were practicable to take the temperature night and morning—which is not the case with hospital out-patients—light would be thrown on the difficulty. If the temperature keeps pretty even, the outlook is good. If the evening rise is marked, then a less hopeful outlook exists.

How is such a case to be treated? In one hospital of repute the routine treatment is quinine and cod-liver oil; not a bad line to take, but scarcely elastic enough for a malady which has such a variety of aspects. What is it we wish to achieve in such a case? That is the first question. We wish to procure absorption of the neoplasm, if possible. Failing that, we wish to save it from molecular necrosis—softening tubercle. Under favorable circumstances the lung may clear up. Our object is to raise the quality of the new growth, and that cannot be done directly, but only by improving the general nutrition. If we cannot achieve absorption, can we keep the new cell-growth from death? Even if some portion do soften and break down, can we save the rest, or build up healthy tissue around the perishing areas?

Our line of attack, then, is to improve the general condition, in which improvement the new growth will have its share. To check the body-expenditure and to increase the body-income are our aims. All outgoings must be stopped. That is the first step—to my mind. If a woman, attend to any leucorrhœa at once. Many a good line of attack has failed, many a woman sunk into her grave who might have been rescued, if only that outgoing had been attended to. If the catamenial loss be heavy, put an arresting finger upon it by some ergot, sulphuric acid, and sulphate of magnesia, commencing with this two days before the appearance of the flux, and continuing it during the flow, reverting to the usual treatment on its completion. "A penny saved is a penny gained;" and this is true of phthisis, almost more than anything else. Then, is there diarrhœa? If so, attend to it. Milk and farinaceous matters are indicated (no meat-broths, no beef-tea—"giving the patient a stone when he asks for bread"—unless some farina be added). Then for medicine some astringent preparation of iron may be given in the day, and a pill of sulphate of copper (gr. $\frac{1}{4}-\frac{1}{2}$) with opium (gr. $1-1\frac{1}{2}$) at bed-time. If there be both diarrhœa and night-sweats this pill will often "kill two birds with one stone."

If there be night-sweats, arrest them at once, or as soon as may be. Sweat is an excretion, and is highly charged with blood-salts. Consequently, profuse sweats are most exhausting. Check them, and the appetite returns, and between the two the patient does well. To my mind, Professor Sidney Ringer, F. R. S., has laid the phthisical world under a deep debt of gratitude by pointing out the potency of belladonna in the matter of hydrosis. The best preparation is atropia, not only because it is tasteless, but because we know exactly what we are doing when using it. But to secure its good effects it must be pushed. Its effect upon the pupil is nothing. Indeed, in a very extensive experience of belladonna the pupil has rarely been affected. (The effect upon the pupil is a bugbear which ought to be buried). Dry throat and dim eyesight are discomforts, but unless severe they need not disturb the treatment. There is a wide gulf between these and any real danger. The very lowest dose is $\frac{1}{75}$ of a grain. If this does not achieve the desired end, then $\frac{1}{60}$. If that is insufficient, then $\frac{1}{25}$. If that fails—which it rarely does—I begin to look seriously at the case. (And here I must do an ungracious act. No one knows better the high claims Dr. Lauder Brunton, F.R.S., has upon therapeutists than the writer. Personal knowledge is added to knowledge of his writings. But, admitting all this, I cannot but regard his commencing dose of atropia ($\frac{1}{100}$ of a grain) as far too small. It is given in his new work on "Materia Medica and Therapeutics," a work of which the profession may justly be proud, and which must be a guide to all. But in this matter it trips). One patient passed a comfortable night with two pills of $\frac{1}{25}$ of a grain in her stomach. When this dose is reached, and yet the sweats continue, I adopt the plan of an old New York quack, of which Lewis Sayre told me, viz., to sponge the patient over with hot vinegar ($\frac{1}{2}$ pint) with a teaspoonful of cayenne in it. This is not at all disagreeable, and is effective. If the combined measures fail, the patient's case is hopeless, but his physician's conscience is clear.

Perhaps the patient's rest is broken by cough. All familiar with consumption know that if the patient fall into a deep sleep hydrosis comes on. If he keep awake he

either does not sweat or the sweat is moderate in amount. The first effect of an accumulation of carbonic acid in the blood is to rouse the respiratory centre to greater respiratory efforts. If that is not sufficient, then the sweat-glands are brought into operation. Unfortunately, the sweat has other constituents than CO_2. It is well to keep this bit of physiology in mind. Belladonna is a potent stimulant to the respiratory centre; it also exercises a profound influence upon the sudoriparous glands. Consequently, it is of the highest value in the matter of night-sweats. By the combination of atropia and opium night-sweats can usually be kept in check. Morphia (gr. $\frac{1}{8}$), atropine (gr. $\frac{1}{80}$), with pil. galban. co. or "pil. al. et myrrh.," as the case may require, is a pill which has done me yeoman service in my warfare with phthisis. It has found its way into the Brompton Hospital, and more recently into Squire's "Companion to the Pharmacopœia." It will find its way before long into every consumption hospital in the world. This action of carbonic acid upon the sweat-glands has led Dr. Lauder Brunton to advocate strychnine (a potent stimulant to the respiratory centre) in the night-sweats of phthisis. No doubt it is useful. My practice is to give it in the day-medicine. My favorite mixture at the hospital consists of liquor strychnine (♏iv.), acid. phosph. dil. (♏xv.), tinct. capsici (♏ iv.), in infus. gent. (℥ j.), *ter in die*. This forms a capital tonic. Some quinine or sulphate of magnesia (or soda) may be added as required.

One of the rules which have formed themselves in my mind is to give acids when the tongue is clean or coated. When the tongue is bare, raw, or irritable, then alkalies are indicated, as am. carb. (gr. ij.–iv.), tinct. nuc. vom. (♏x.), inf. gent. (℥ j.), *ter in die*.

On such a line of treatment the patient usually improves. The night-sweats cease, the appetite returns, the cachectic look departs, and the patient feels much better. The improvement is maintained, and soon iron and arsenic can be added to the strychnine, and cod-liver oil to the dietary (but cod-liver oil is not the best form of fat, nor yet the most palatable, though it is the most digestible. Some forms of fat in an emulsionized state are now on the market which possess many advantages over cod-liver oil). Iron is a good hæmatinic.

Arsenic is an alterative and a tonic greatly believed in by many good observers in lung-consolidation. If the patient can be induced to take fat in any form, the healthy tissues can be built up. Very commonly the affected area is found to shrink, and air to pass into it. In a few months, in many cases, it is scarcely possible to detect any change in the lung. The threatened danger has passed away!

How far external applications of iodine are of service, I cannot say, knowing little about them. Some good men think highly of them.

All along in the treatment advocated the matter of improving the general condition has never been lost sight of for a moment. If the patient can get away to a dry soil and a bracing locality, all the better for him or her.

Another common patient is the person who has chronic phthisis with cavities. Such patient is always spare and badly nourished at the best; and when any intercurrent ailment still further lowers the general condition the lung trouble is aggravated. (And one matter has forced itself upon my attention, viz., that wherever there is old lung-consolidation any disturbance in the liver sets up irritation in this consolidated patch with resultant cough. And this cough, which is intractable to ordinary cough-medicines, is relieved by acting upon the liver.) The appetite has fallen off and the nutrition is impaired; and then the special danger in phthisis is set up. Very often the tongue is raw, or beefsteaky, or patchy. Here attention to the *primæ viæ* (as our grandfathers phrased it), is imperative. The patient must be sent to bed, to reduce the body expenditure to the minimum. The medicine must be bismuth, with alkalies; and the food, milk with malt-extract, or a malt preparation like Mellin's food, in small quantities at a time, oft-repeated. Any bulk of food is rejected by the irritable stomach (which remembers the offence), and so the dietary must be arranged accordingly. Even a blister over the stomach, with some powdered opium or morphia dusted over the raw surface, may be indicated. In young patients there is another reason for such food, and that is the danger of starting up tubercular ulceration in the bowels. It frequently happens that a poor patient when taken into the hospital is put upon the usual dietary, with the result of disturbance being at once set up in the alimentary canal. The bowels have not been accustomed to such food, however simple it may seem to well-fed persons. Again and again has this occurred in my experience; indeed, with almost every new clinical assistant, who has to learn—as I did myself by painful experience—what a very poor pasture these hospital patients come from. Some fish and potato—which the patient enjoys, doubtless—are enough to start up a diarrhœa which is troublesome, and sometimes, despite all we can do, passes on to tubercular ulceration and death. The food should consist of milk and malt, or meat-broth with biscuit-powder in it. No solid particle in it to vex and irritate the sensitive (because ill-fed) mucous membrane. Even an alkali—like carbonate of magnesia—may be required to neutralize acidity and prevent too firm curdling of the milk; as much as will lie on a sixpence to the half-pint of milk is usually sufficient. Having got the assimilating processes into good working order, the tonics may be given. "The more haste the less speed" is specially true of the treatment of phthisis; and the desire to push on with tonics and good food sadly too often defeats its own end. Sometimes a masterly inactivity is the wisest practice. A clear head and a firm will are often required to curb the desire of the patient (and still more the patient's friends) to be getting on. Back-cast after back-cast teach a painful lesson to the medical man, and involve the patient in acute danger. If the pressure put on a young medical attendant is becoming more than he can bear, let him call in an older head to help him.

And now as to what must *not* be done. The chief thing to avoid is morphia linctures for the cough. An opiate to procure sleep may be essential and unavoidable; but sedatives in the day are dangerous. They give relief from the cough—granted; and too commonly they give permanent relief by death. Opium lays its palsying hand upon the assimilative organs, and destroys the appetite. Its evil effects seem most distinctly felt by the liver. When an opiate is indicated at night it should be combined with ipecac to antagonize its effect upon the liver, and with aloes and myrrh pill to correct its action upon the bowels. The morphia lincture is unknown in my wards except under the most peculiar circumstances, or until all hope has been abandoned and the treatment is a matter of euthanasia. Opium strikes directly at that assimilation which is to my mind the cardinal matter in the treatment of phthisis. I would rather have to deal with a large area of disease in the lungs where the assimilation is good, than a smaller patch if the appetite is bad and the nutrition defective. The patient most certain to die, the case least amenable to any treatment, is that one whose wasting progresses steadily, and where the lungs are only affected quite late on—indeed, a brief while before the final change sets in.

As to other means of allaying the cough than opiates, inhalations of steam are often serviceable. Friar's balsam, iodine, carbolic acid, terebene, eucalyptus, all are good as additions to the steam. Where there is a cavity with ragged walls smelling offensively, a respirator with cotton wool charged with carbolic acid is indicated. (Of treatment specially directed to the extinction of bacilli I know nothing personally).

Then, as to other means of feeding the patient, there are inunctions of oil, often of service, especially with young subjects. Nutritious enemata have only lately suggested themselves; but in one case of a medical man steadily

wasting, an enema of cod-liver oil (emulsionized by a drop of bile) and milk in equal quantities is being tried. In appropriate cases in the hospital the plan is about to be tried. Such enema night and morning, while in the recumbent posture, would be readily retained. When the temperature mounts up, and especially when the skin is also moist (the usual state in hectic fever connected with phthisis), my plan is to give quinine (gr. ij.–v.), with tincture of digitalis (♏. x.–xv.) and dilute phosphoric acid (♏. xv.), thrice daily. The effect is very satisfactory usually. Where a severe racking cough is present, shaking the poor sufferer terribly, it may be necessary to give opiates; but, in my experience, such cough is very rarely found with pulmonary phthisis.

Hæmoptysis has so far escaped notice. The treatment of hæmoptysis is quiet; no movement, no talking. When it arises from the bursting of an aneurismal sac in a cavity, or from an ulcerating process eating into a blood-vessel and opening a communication between the vessel and an open air-tube, syncope alone is likely to arrest it. In congestion of the lung it is often an excellent form of local bleeding. Men of old bled for its relief; now free purgation with mineral salts is in vogue. For small recurrent hæmoptyses the best treatment is to keep the bowels open. Ice, ergot, and dilute sulphuric acid may also be tried; probably they will do no harm. It is a bad plan to feed up a case of recurrent hemorrhage; it only fills the vessels rapidly, to end in more bleeding.

Finally, the management of phthisis pulmonalis, whether the less grave or the more serious conditions, is a good test of the knowledge, skill, and tact of the practitioner, who must, like a competent soldier, be able alike to plan a campaign or execute a sudden change of front in an emergency. That is, he must be able to lay down a persisting plan of treatment, and promptly change his plan to meet some intercurrent condition, as hæmoptysis or acute gastric disturbanee.

HEADACHE AND OTHER REFLEX-NERVOUS TROUBLES AS THE RESULT OF EYE-STRAIN—WITH SIX ILLUSTRATIVE CASES.

By A. R. BAKER, M.D.,

PROFESSOR OF DISEASES OF THE EYE AND EAR IN THE CLEVELAND POLYCLINIC AND POST-GRADUATE MEDICAL SCHOOL.

Case I.—Miss B——, aged twenty, was not able to read at night for several years. Left school on account of "weak" eyes. Never had any pain in the eyes, but had been an almost constant sufferer from frontal headache. Could not sew on striped goods, and walking behind a person with a striped dress always made her dizzy; and several times, when ironing striped material, she became so sick as to produce vomiting. She compared her feeling at such times to being sea-sick. She had compound hypermetropic astigmatism, and when corrected was entirely free from all her unpleasant sensations, and could read all night, as she expressed herself a year afterward.

Case II.—Mr. E——, aged twenty-nine, principal, public schools, has been a sufferer from periodical headaches for ten or fifteen years, returning regularly two or three times a month. During vacations he was free from headaches, unless he attempted to read, which he avoided as much as possible. Attacks were so severe as to incapacitate him from work for two or three days, and he would have been compelled to resign his position if it were not that his headaches usually commenced on Fridays and he was able to return to work on Mondays. The only way in which he could get relief from the intolerable pain was from the hypodermic use of morphia. The quantity had gradually been increased, until several grains were required, and as the result his bowels and digestive apparatus were always in a bad condition. Since being corrected for a high degree of compound hypermetropic astigmatism he has not had a single attack of headache, a period of almost two years.

Case III.—Fred. A——, aged nine, never had any trouble with his eyes, until, after an attack of measles, he was suddenly taken with what he was pleased to call "blinking," and was not able to read and compelled to leave school. Upon every effort to read there was a spasmodic opening and closing of the lids almost choreic in character. Eyes water, and feel weak and somewhat sensitive to light, but no pain in head or eyes. There was about 1 D. of hypermetropia, and when corrected he was able to return to school and do his work with no further trouble. Several attempts have been made to get along without the use of the spectacles, each time with a return of the "blinking."

Case IV.—Frank W——, aged twelve, ever since he had measles, six or eight years ago, has had trouble with lid margins. They are red, lashes gone in places, at others matted together in pencils. Margins of lids scaly, with small scabs scattered irregularly, covering small ulcers; lids slightly everted, showing a little of the conjunctiva, giving the eyes a red unpleasant appearance. The boy has been under almost constant treatment for years, sometimes better, sometimes worse, but never any permanent improvement. I suspected hypermetropia at once, but from a hasty examination without atropia I failed to discover any. After treating the case unsuccessfully for some time, I paralyzed the accommodation thoroughly with atropia and unmasked 1 D. of latent hypermetropia. I gave him a pair of spectacles, with instructions to wear them constantly. At the end of one month, with no other treatment, the lids were looking quite well, and in two months they were perfectly well.

Case V.—Master Willie P——, aged six, brought to me two years ago with convergent strabismus. I corrected his hypermetropia fully, with suitable spectacles; in a few days his eyes became straight and have continued so up to the present time.

Case VI.—Miss Alice K——, aged fourteen; since a child the hair on top of her head has never grown over half an inch in length. It is coarse, hard, and curly, ends broken and split; looks very much like the hair of a negro. On the back part of the head the hair is fine and glossy, and would grow several feet in length. Family history good; general condition good. The skin is apparently healthy, and no cause could be assigned for the condition of her hair. She had consulted leading dermatologists, both at home and abroad, and undergone treatment, externally and internally, from physicians regular, irregular, and defective. She has suffered at times severely from headaches, but in other respects has always been healthy. I was consulted on account of her eyes giving her some trouble in school during the winter. Eyes tired easily and suffered more than usual from headache. I found she was hypermetropic and prescribed glasses accordingly. As I expected, she was freed from headache, but I was somewhat surprised to learn that her hair commenced growing at once; at present it is fine and glossy, reaching to her waist, and no difference is to be noted between that on the top of her head and elsewhere.

Whatever theory we may maintain with regard to the relation of the sympathetic to the cerebro-spinal nervous system, and the influence one exerts upon the other, the well-known experiments of Claude Bernard, of dividing a branch of the sympathetic, is known to exert a very decided influence upon the circulation, calorification, secretion, and nutrition of the parts to which it is distributed; while exciting the same nerve by the galvanic current or otherwise, produces a series of phenomena exactly the opposite. From these well-known considerations, as well as from the clinical observation of reflex nervous troubles in various organs distant from the source of irritation, such as the vomiting of pregnancy, pain in the knee from morbus coxarius, pain in the penis from the irritation of stone, supraorbital neuralgia as the result of dental irritation, cough as the result of a plug of wax in the ear, etc., it can be easily understood how the constant irritation produced by the incessant eye-strain,

as the result of hypermetropia or astigmatism, might cause the intense headaches, the dizziness and sickness of the stomach, the reflex nervous disturbances of almost every organ, and even the disturbance of nutrition which prevented the growth of hair, as in Case VI.

The sickness at the stomach and dizziness I have found quite a frequent complaint in astigmatism, usually accompanied with more or less headache. One case I remember fitting with spectacles some years since said that even the mention of a barber's pole made him feel uncomfortable about the pit of his stomach. The patient's comparison of her sensation with that of sea-sickness is very *apropos*, as the cause in both cases is similar. One of the principal causes of sea-sickness is the constant effort required to accommodate the eye to constantly changing distances; the same is true of riding on the railroad, swinging, etc.

In cases of refractive error the pain very frequently is not referred to the eye itself. In fact I think it is rather exceptional where such is the case. Pain is usually complained of either in the frontal region, temples, or back of the neck. Dr. S. Weir Mitchell, in an article in the *American Medical Journal*, 1874, says, "that while there may be no pain or sense of fatigue in the eye the strain is interpreted solely by the occipital or frontal headache." The patient, when interrogated, will usually say that the eyes are "weak," and "blur," and get "tired" easily, but seldom associate their headache with their eyes. It is not to be imagined that every headache is the result of error of refraction, no more than that every case of infantile convulsions is due to an elongated prepuce. But when no other cause can be discovered, *every case of headache should be examined carefully for errors of refraction.* The accommodation should be thoroughly paralyzed with atropia, as the hypermetropia may be latent, as in Case IV., and not be discovered by the use of test-types. It is not unusual to meet hypermetropes wearing concave lenses fitted by opticians.

Cases of blepharitis marginalis are met with daily as the result of refractive troubles in ophthalmic practice. I usually recognize cases of hypermetropia in children as soon as they enter the consultation-room, from the condition of the margins of the lids, especially in dispensary practice, where strict attention to washing off the scales is not observed. If this constant eye-strain produces such marked changes on the lids, what must be the result on the eye itself?

Convergent strabismus is the result of hypermetropia, and could be prevented if glasses were fitted and worn early enough. Children four years of age will wear spectacles without trouble. The benefit to be gained from wearing spectacles early is not only the avoidance of an operation, which is a secondary matter, but it preserves binocular vision, which is of very great importance.

DAMIANA AND THE MORMON ELDERS.—Dr. W. B. Parkinson, of Utah, writes to the *Medical Age:* "I notice that in your issue of April 10th, you copy an article from the *Keystone Medical Journal*, by F. A. Evans, M.D., on the use of damiana, in which he accredits the Mormon elders with using the drug extensively to keep up 'their wasted energies.' I simply wish to state, in behalf of a much-abused people, that I have practised medicine among them for three or four years, extensively, and have never had one single case of impotence. Have only had one case of syphilis and one of gonorrhœa, and they occurred in 'black sheep.' Have known the benefits and uses of damiana, and I, with many other physicians, can testify that the Mormon elders do not use the drug as our worthy brother gives them credit for doing. The object they have in marrying more than one woman is to rear a stronger progeny. When a woman becomes pregnant, they *let her alone* and cohabit with another. I say *fair play*—'Give the devil his due.' The Mormons are often misrepresented."

SCIENTIFIC VALUE OF THE MORTALITY CENSUS.

BY WILLIAM GILMAN THOMPSON, M.D.,

NEW YORK.

PROBABLY no branch of the census indicates an expenditure of greater labor with less actual benefit to anyone than the "Mortality and Vital Statistics of the Census of 1880," [1] just published after five years' work. Not that Dr. Billings has not done all that was possible to tabulate the returns in scientific and practical form, but the liability for error is so great, amounting in the aggregate to thirty per cent., and in special cases to much more, that any reasoning based upon the tables must be conducted with great caution. The errors are due to the vast size and wide distribution of our population, to the constant immigration and migration, and more than all to the absence of systematic local records of vital statistics. Had we a paternal government, like, for example, that of Germany, where a policeman or some official with a note-book follows your every move, our statistics might be worthy of more credence; but with our happy independence, and the total absence in many parts of the country of requirements for registration of vital statistics, and absence of any guarantee of the respectability of those calling themselves physicians, scientific accuracy is wholly impossible. A vigorous attempt was made to secure a nearer approach to accuracy in the present census than has been obtained heretofore. Blanks were sent in advance to physicians in all parts of the country, excepting in a few large cities where careful mortality records are kept. These blanks were to be filled with vital statistics for the year and returned. Only thirty-seven per cent. of the physicians addressed returned their blanks, on which 166,896 deaths were reported. (The total number of deaths for 1880 was 756,893.) The census enumerators, meanwhile, covered the same ground, and failed to report 61,020 of the deaths reported by physicians (!), although they of course reported a great number of additional deaths. (A similar discrepancy existed between enumerators' returns and the regular city records, where they overlapped.) This seems an incredible error, but it is made even more confusing by some of the diagnoses returned upon the "physicians'" blanks. Dr. Billings cites a few of these: "Struck in on the Aire Sells," "Yaller Ganders of the Liver," "New Money Fever," "Colory in Phantum," "Tecis" (!). Autopsies were obtained in 21 cases in every 1,000, and 49 cases in every 1,000 of all ages could not be diagnosed. A number of improvements have been made in the census of 1880 over that of 1870. Thus, in more or less chronic cases the place where the disease was contracted was ascertained, and the place of birth of parents of decedents, and names of their attending physicians were recorded. In former censuses the unit of locality employed was the State or Territory. This, being an arbitrary political division, was of little value. It was also too large, for the interest of a census depends upon how near home it is brought to individuals. So in 1880, in addition to the previous form of tables, which was retained for comparison, such counties as have a population of 10,000 and over were separated and arranged geographically in twenty-one grand groups, an attempt being thus made to compare the death-rate with the topography of the country. Such groups, *e.g.*, are "heavily timbered region of the Northwest," "prairie region," etc. In addition, the vital statistics of fifty large cities have been separately tabulated. In most of these cities the records have been obtained directly from the local health boards, etc., and this constitutes by far the most accurate part of the census. The race statistics have been extended to include, in addition to the whites and negroes, Indians, Chinese, and children of Irish and of German parentage. There is much in a mortality census which might be of value in a coun-

[1] Report on the Mortality and Vital Statistics of the United States, Tenth Census, Part I., June 1, 1880, by John S. Billings, LL.D., Surgeon, U. S. A. May 1, 1885.

try of a fixed population which is of very little use to us. What shall it profit physicians or anyone, to learn that in 1880 only one child died of measles in Wyoming, while eight children died of measles in New Jersey? Yet it has cost a great deal of time and of money to ascertain such facts. Dr. Billings himself admits the futility of the census in many respects, and calls attention to the fact that many of its tables which are of no value at present may serve as guides for future statisticians.

This is the fourth of the great mortality censuses of the United States. The first was taken in 1850. It is useless for the comparison of total mortality with previous censuses, and can be compared with them only for the proportion of deaths from different diseases and at different ages—and even in these respects it is valueless in many details; and it affords a pointed moral for our need of more harmony and common-sense in the nomenclature of disease. Thus among the causes of death in 1870, deaths from "alcohol" are classed under "Poisons," while in 1880 they are classed under "Alcoholism" in Group B of "General Diseases."

Addison's disease appears in 1870 as a disease of the "Integumentary System;" in 1880 as a disease of the "Absorbent System." In 1870 sunstroke is classed under "Nervous Diseases;" in 1880 it is cautiously placed among "Accidents and Injuries."

In 1870, "Old Age," "Still-born," and "Debility" are causes classed separately as "Conditions not necessarily Associated with General or Local Diseases," while in 1880 they appear under "General Diseases, Group C." In 1870, typho-malarial fever, hydrothorax, pyæmia, yellow fever, and typhus fever are all separately mentioned, but in 1880 they do not receive any notice, their place being absorbed by the non-committal division, "Fever."

Septicæmia and angina pectoris appear for the first time in 1880.

In 1870, "Worms" constituted a separate class. In 1880 they are placed under "General Diseases." The "Diabetes" of 1870 appears as "Glycosuria" in 1880, and, in brief, the old classification of 1870, which numbered one hundred and forty-nine divisions, has been reduced to one hundred and eight in the new census.

A handsome tribute to our advancing civilization is found in the facts that the deaths due to railroad accidents in 1870 numbered 1,461, and in 1880, 2,349; and the deaths referred to "Diseases of the Nervous System" in 1870 numbered 33,550, which increased in 1880 to 81,905 (!). "Consumption" seems to have progressed with utter disregard for the rate of increase in population. The deaths from this cause in 1870 were 33,971; in 1880, 91,270 (!).

The usual infantile mortality continues to be more than twice as great in the cities as in the rural districts, and more than two and a half times as many infant deaths occur from diarrhœal diseases as from any other single cause; next rank (2) convulsions, (3) diphtheria and croup together, (4) pneumonia. Whooping-cough is also very fatal; 36.3 deaths among every 1,000 deaths among infants under one year are due to it. The colored mortality continues much greater (2.54 per 1,000) than the whites, and it is enormous among infants under one month. The mortality of infants born of German parents is proportionally decidedly greater than among those born of Irish parents, but as a whole the Germans and Irish appear to lose their peculiarities regarding mortality after continued residence among us.

The proportion of deaths of females to males is as 931 to 1,000.

Far more Indians die of consumption than of any other disease, and as compared with white people, relatively more Indians die of measles, diarrhœa, malarial fever, and venereal diseases. The total death-rate for the country for 1880 was 15.09 per 1,000 of the population, according to the census, or 2.32 per 1,000 greater than in any previous census year; but Dr. Billings gives excellent reasons for not accepting these figures, owing to numerous unavoidable errors, and he estimates it at 18 per 1,000. This rate is slightly lower than that of any other civilized country, and thirty-three per cent. lower than that of many countries.

The last mortality census is quite an advance upon its predecessors, and praise is due to Dr. Billings for the indefatigable labor and skill he has bestowed upon it.

Reports of Hospitals.

HÔPITAL DE LA PITIÉ, PARIS.

CLINIC OF PROFESSOR VERNEUIL.

SPONTANEOUS FRACTURES—ECTOPY OF THE TESTICLE COMPLICATED WITH INGUINAL HERNIA; OPERATION.

(Reported by W. W. SKINNER, Externe des Hôpitaux.)

GENTLEMEN: We have in our wards a patient at whose bedside we stopped during a few moments this morning. This patient, a woman, aged sixty-five, is far from being vigorous for her age, and presents a very slight appearance of cachexia, but so feebly pronounced that it is impossible to determine its nature. Her personal antecedents are excellent. She has never been seriously ill in her life. Several years ago, however, she fell upon the palm of her right hand, causing a fracture of the forearm at its lower third. The fracture healed in a favorable manner and has remained consolidated. The patient is the mother of four children.

To-day we find her in the hospital on account of an accident which happened to her two days ago. It occurred in the following manner: She was about to climb into an omnibus, and seizing hold of the iron railing to aid herself, she took her place without having made any violent effort and without experiencing at that time any pain or any sensation of fracture or crepitation. But from that moment the left arm became powerless, for she could not raise it from its pendant position. The examination of the arm which you have seen me make immediately revealed abnormal mobility, having for its centre the middle third of the humerus. This sign of fracture was sufficient for the diagnosis, and others were not sought. It is evidently a case of fracture of the humerus by muscular effort.

It is worthy of remark that while the present fracture was unaccompanied by pain at the moment of its occurrence, so much so that the patient ignored the exact moment of its production, the first fracture, that happened several years ago, was accompanied with the usual severe functional signs.

Searching still for further the cause of this unusual fragility of her humerus, we do not find any symptoms of diabetes, neither by examination of the skin, nor by that of her urine, nor yet by interrogating her as to functional disorders; for the skin presents no eruption, the urine no precipitate by Fehling's solution, and there exists no polydipsia nor polyuria. Nor is there any sign of cancer, for the careful exploration both of the broken bone and of the viscera exclude that cause of fracture. There is, however, a hiatus in the analysis of the urine, for it has not been tested for excess of phosphates, and I am inclined, until a complete analysis shall prove me to be in error, to regard this fracture as caused by an abnormal fragility of the bones coinciding with *phosphaturia*. Should this prove to be the case it will increase the already accumulating records showing a relation between the production of spontaneous fractures and this alteration of the urine.

You have heard me speak of two patients reproducing this variety of fracture, one at the hospital, the other in my private practice. I will relate to you a *résumé* of this latter's history. The patient was also a woman, aged fifty-eight, robust, *gaillarde*, apparently in excellent health, with nothing of cachexia about her. Her arm was broken about a year ago and was properly treated so

that a good consolidation was believed to have been obtained. Six weeks ago an insignificant fall occasioned a sudden loss of power and voluntary mobility in the member formerly broken. Her physician examined the arm and sent the patient to me.

I found the humerus fractured; but when the lady came under my observation I suspected that she had diabetes, for this disease predisposes to fractures and to imperfect consolidation of fractures. Upon my suggestion she caused her urine to be carefully analyzed, and the principal results obtained are as follows: Absence of glucose; density, 1.027, which is high; urea, 41 grammes per litre (a figure not very astonishing considering the large amount of nitrogenous aliments the lady was in the habit of ingesting, as she was well-nourished); 4 grammes of *phosphoric acid*, which is nearly double the normal proportion; and very much uric acid and urates.

Thus it sometimes happens that fractures are caused by a very slight traumatism. You know that for their production there are two general predisposing *causes:* first, a *local disease* of the bone; second, a *dyscrasia* or modification of the general nutrition. There is no need to tell you that tuberculous or cancerous bones are broken with the greatest facility. You know that at the Salpêtrière, at Bicêtre, in asylums for the aged generally, but especially in cases of old women, fractures are often produced by the most insignificant causes; even the changing of the patients from one bed to another produces them.

Syphilis predisposes to these fractures. But when a syphilitic breaks a bone we know that there exists quite severe pain at the seat of fracture. There are, moreover, cases of fractures without tubercle, without cancer, without syphilis or cachexia whatever, in which no pain is felt either at the instant of the production of the solution of continuity, or subsequently. There exists, therefore, some other disease which coincides with this anomaly; that disease was formerly unknown, but is studied to-day under the name of *phosphaturia.*

With your permission I will cite another instance of this dyscrasia. A fine lad of fourteen, apparently strong and healthy, was employed in serving masons. His work consisted in taking four bricks in his hands and throwing them to the man next to him, as is the custom here among bricklayers. On one occasion, while in the act of tossing them, the humerus on one side suddenly broke, to the great amazement of himself and of those who observed him. We sought, in explanation of this phenomenon, a dyscrasia, and found that his urine contained a great quantity of phosphorus.

You observe that we find a striking coincidence between fractures too easily produced and an exaggerated elimination of phosphates. This disease, phosphaturia, in its relation to fractures, is not yet thoroughly investigated, and we have only a few phases of its history in our scientific archives.

I am about to perform an operation of great interest, one which has not been frequently practised, and about which little has been published. It would be very desirable for some one to launch a monograph, or at least an essay, having for title something like this: "On the Coincidence of Affections of the Scrotum with Hernia from the Operating Point of View." Such a work would greatly help to determine whether an operation ought to be practised upon the testicle when the scrotum is occupied by a hernia. For my part, I have already operated twice in these conditions. The first patient narrowly escaped death from the operation; the second died. We will speak again of these cases a little further on. To-day I operate on a third, which will, I hope, prove a success.

That which is most interesting in the present case is the situation of the testicle to be removed. The patient is an adult, robust, vigorous, in the most favorable condition of health, but whose right testicle occupies the external ring of the inguinal canal, in which position it has remained since birth. Three months ago the patient made a violent effort which probably caused or confirmed the existence of the hernia, and since that moment the testicle has become swollen and painful. The progress of these symptoms has been so rapid that to-day we have decided to perform the operation of castration on the diseased organ.

Many similar facts have brought an *eclatante* confirmation, accepted by all, of the gravity of operation in cases of testicular ectopia. On the other hand, testicles in ectopia are greatly predisposed to *cancer.* The coincidence is strking. The surgeon is thus often called upon to treat a degenerated testicle in this position, and the ablation of the diseased organ is the only chance of success. But he is obliged to open the abdominal cavity if the hernia has closely followed the testicle. The inguinal canal is large and gaping; and he almost constantly makes a penetrating wound of the abdomen in seeking to isolate the testicle from the surrounding tissues. The degeneration of the testicle in the external abdominal ring is so much to be feared that it has been proposed to practise the ablation of the *healthy* testicle when arrested in that position, in order to avoid its subsequent cancerous degeneration. I have an observation of a case of this nature concerning a man twenty-seven years of age. The testicle in ectopia moved easily in and out of the abdominal ring. I advised the ablation of the organ, which was in no way diseased, and the operation was successfully performed by my colleague, Monsieur Terrier.

These several observations are extremely rich in pathological deductions. Many writers have contested the influence of traumatisms, irritation, accidental and oft-repeated rubbing or pressure of the testicle, upon the production of neoplasms of this organ. The influence of these causes, however, is strikingly evident when we consider the testicle in three different positions—in the abdominal ring, in the scrotum, and in the abdomen. When permanently occupying the subcutaneous abdominal ring, cancerous degeneration of the testicle is comparatively frequent, occurring in about one-fortieth of the cases; when in the scrotum it is far more *rarely* the seat of cancer, and when in the abdomen it is *never* cancerous. You easily perceive from this statement the influence of the position of the organ upon the production of degeneration, and I am disposed to account for it by invoking the specific causes above mentioned.

Returning now to the operation practised in my two cases, I will explain to you their particularities. The first was a hæmatocele, which I operated upon with the bistoury. At the moment of making the incision I saw a thin sheet of omentum placed before the hematocele between my instrument and the tumor. I resected the omentum. In spite of my multiplied efforts to produce perfect hæmostasis there was a very disquieting hemorrhage from the omentum and the severed arterioles of the sheath, which nearly cost the patient his life, and I feared for the success of the operation, but to-day the cure is established.

My second case was still more complicated. The patient was a gentleman of robust health, vigorous, and of excellent constitution, but afflicted with a sarcocele, a varicocele, and a large hernia, all on the same side. I operated in company with Monsieur Cazin, of Berck-sur-mer. The testicle was first taken away, but by so doing the hernial sac was largely opened. The breach made into the peritoneal cavity was quite vast, and was closed by sutures. But during the same day there occurred incoercible vomiting, and soon other signs of superacute peritonitis manifested themselves. Death occurred on the third or fourth day after the operation, as in cases of penetrating wounds of the abdomen.

To-day I operate on my third case in your presence. We shall take every precaution to avoid a fatal issue. After the ablation of the testicle we shall suture the peritoneum, if opened, just as in ordinary laparotomy, and to this end I have caused to be prepared some silver

wire for sutures, and a straight *chassefil* with which to place them, for we are probably going to cause a loss of substance of the peritoneum.

[After the patient was chloroformed the Professor made a nearly longitudinal incision of eight centimetres in length in the region of the testicle in ectopy, incising the superposed layers until coming upon the testicle itself. He then isolated the testicle and the penis for a distance of two or three centimetres, placing hæmostatic forceps upon bleeding vessels and tying these with catgut, after which the spermatic cord was divided. The hernial sac was not opened, and no sutures were made. The wound was dressed with iodoform, over which was placed a large thick layer of cotton, held in place by an appropriate bandage. The macroscopic examination of the diseased testicle showed a commencing sarcocele.]

Clinical Department.

THE CHLOROFORM TREATMENT FOR TAPE-WORM.

Dr. Alfred W. Perry, of San Francisco, reports an obstinate case of tænia lata, successfully treated by the exhibition of chloroform. The patient, a stout man, aged forty, had had a tape-worm for eight years, on which he had tried all the hitherto known remedies. He always vomited the remedy used within half an hour, retaining longest the French capsules of male fern extract. Dr. Perry had made two attempts to dislodge the worm, without success, when he saw the chloroform treatment noticed in The Medical Record. He used it in the following manner, with entire success: The patient was made to fast from 12 M. of the previous day, and only allowed to drink lemonade. At 7 A.M. he took one drachm chloroform in one ounce of mucilage; at 8 A.M. one ounce of ol. ricini. The entire worm passed about 10.30 A.M. The patient was in considerable stupor shortly after taking the chloroform, which stupor lasted three or four hours. He was a large man, weighing one hundred and eighty pounds. Dr. Perry thinks that one drachm of chloroform should not be exceeded as a dose.

ACUTE ATROPHY OF THE LIVER.

Dr. E. Frank Marsh, of Oswego Falls, N. Y., reports a case of the above. On July 25, 1885, he was called to see J. C. M——, a young woman, twenty-one years of age. She is said to have had syphilis, contracted about two years ago.

She complained of nausea, and the vomited matters were very acid and bitter. Bowels flaccid, and no pain or tenderness could be made out. Pulse slightly elevated, and temperature normal. Tongue covered with a white fur. Bowels had not moved in three or four days. Prescribed a cathartic.

The next day she felt so much better that she rode out. About this time her menses came on, and were about normal as to quantity and duration.

July 27th.—Saw patient again; no particular change. Bowels had moved, but not freely. Conjunctiva began to assume a yellow tinge. Prescribed ten grains hydrarg. chlorid. mit. in one-grain doses, one powder to be taken every hour.

July 28th.—Jaundice more marked. Temperature normal, and pulse 85. No tenderness or pain, except a slight headache. There is some desire for food, but it is not well retained. Bowels have not responded to the calomel. Prescribed five improved comp. cath. pills, and five more to be taken the following A.M., if the bowels do not move freely.

July 29th.—Bowels have moved twice slightly. Stools clay-colored. Urine normal in quantity, but very high-colored. Skin decidedly yellow. Patient somewhat weaker; but the desire for food continues. The hands are slightly swollen, but the mother states that such has been the case for two years. Pulse, 90; temperature, 98⅘° F. Prescribed one-half grain podophyllin every three hours.

July 30th.—Jaundice more marked; tongue continues furred, and there is almost constant nausea; the vomited fluid at times stains the clothing green. Prescribed a mixture of chloroform and bismuth.

July 31st.—11 A.M.: There is considerable hebetude; she protrudes her tongue only after being told two or three times, and lets it remain until repeatedly told to put it back. Examined abdomen carefully. No tympanites or tenderness can be made out. Says she is in no pain. Area of hepatic dulness less than normal. Pulse higher, temperature normal, and jaundice intense. 8 P.M.: Patient has been delirious since noon; has not called for any food or drink during the day; but has taken some when offered her. Vomits some. Pulse, 108; temperature normal, and pupils somewhat dilated. Sinapism applied to back of neck.

August 1st.—8 A.M.: The mother says the patient slept quite well from 9 P.M. till 3 A.M. Passed her urine unconsciously. About 7 A.M. she became so wildly delirious that she threw herself from the bed, and at times screamed so loudly as to be heard two blocks distant. Pupils dilated, but respond somewhat to the light. Temperature normal, and pulse 110; respirations, 7, and somewhat sighing in character. By advice of a brother physician Dr. Marsh gave her one ounce of sulphate of soda in solution, part of which was rejected by vomiting. Condition, active delirium alternating with periods of stupor. Pulse, 110; temperature, 98⅘°; respirations, 7, and very deep. She takes a little milk. Dr. Marsh was called out of town that evening, and at his request she was seen by Dr. Wells, who found pulse 108; temperature, 98°; respirations, 9. A profuse bilious evacuation has just taken place.

August 2d.—8 A.M.: Respirations, 18; pulse, 90, and irregular; temperature normal. Eyes partly closed; tongue dry, and there is much difficulty in swallowing, which is entirely mechanical. Bowels have moved a number of times during the night, and the discharges were watery and dark. The mother said she had a number of convulsions, after which she passed into a deep stupor. Two hours later: Pulse, 115; respirations, 25. The extremities are warm. 1 P.M.: Pulse, 130; respirations, 43; temperature, 102½°. She gradually sank after this and died about 10 P.M.

Autopsy twelve hours after death. Body appears well nourished. Rigor mortis well marked. Jaundice intense, with marked discoloration of skin in patches over chest, neck, sides, and legs. Liver shrunken, and weighs less than two pounds. Is somewhat mottled in appearance. On section there is a loss of definite structure, and it is ochre-colored in spots, some of them quite large. The cut surface appears granular, and the whole organ is decidedly flaccid. The left lobe is especially small. Gall-bladder partly filled with a dark green gelatinous fluid. Mucous membrane appears normal. The cystic duct, hepatic duct, and common choledoch duct are all open and apparently healthy. The other organs presented no noteworthy lesions.

WORMS IN THE FRONTAL SINUS.

Dr. Albert S. Adler, of Solomonville, A. T., writes that he was called to see an aged Mexican who was suffering from a high fever, pains in the bones, and a very intense pain extending from the hard palate to the forehead, feeling "as if a piece of wood had been forced through." There was hemorrhage from the nose, accompanied with a serous discharge, and lachrymation. These symptoms had come on only a few hours before the man was seen. The axillary temperature was 102° F. The case being supposed to be one of intermittent fever, quinine in full

dose was given. The next morning the temperature had fallen about two degrees, but the pains continued as before. Upon looking closely at him it was seen that the face on either side of the nose was puffy, and this suggested inflammation in the antrum of Highmore. The teeth were sound. The same treatment was continued, cold cloths being applied to the forehead. During the following night from sixty to seventy worms were passed from the nose, and the pain was in consequence much less, being confined now to the frontal region. The worms were about one-half inch in length. Irrigation was then made with solutions of salicylic acid, permanganate of potassium, and corrosive sublimate. No worms escaped while the irrigations were being made, but some came away later. Trephining of the frontal sinus was advised, but the patient would not consent. He later consulted a woman, who gave him a powder to snuff up. Up to the present time he has passed upward of one hundred and fifty worms from the nose; they have now ceased to come away, but there is a constant purulent discharge.

A LARGE NEEDLE SWALLOWED AND PASSED BY AN INFANT.

Dr. Dugan, of Springfield, O., writes that he was recently called to see Carrie F——, aged twenty-two months, whose mother saw her swallow a needle. The mother was sewing, and had placed the threaded needle in the bosom of her dress to use the scissors. Presently she noticed the baby coughing, and turning to discover the cause she saw the thread protruding from the baby's mouth. She made traction on the cord only to let the needle go down. The baby suffered in no way during or since the occurrence. The doctor directed solid food to be given, with the view of conveying the needle through without coming in contact with the intestinal walls. Two days after the accident the child passed a large-sized needle, one and three-eighths inch in length, with sharp point and black in color. It was corroded.

GUN SHOT WOUND OF THE BRAIN—RECOVERY.

Dr. Willis Butterfield, of Belvidere, Ill., reports an interesting case of a little girl, Gertie M——, ten years of age, who was standing talking to a companion, and suddenly sank down to the ground apparently lifeless. Her playmate heard a queer noise, which was the "spud" of the bullet, which struck the girl's head an inch above and behind the right ear. When Dr. Butterfield saw her, a few minutes later, she was wholly unconscious, and on the walk where she fell was a pool of blood containing about a teaspoonful of brain substance. Within half-an-hour an ecchymotic swelling appeared above the eyeball in the outer part of the right orbit. Blood had flowed from the nose immediately after the injury was received. Dr. John Best, of Arlington Heights, was called in consultation. The opening in the skull was round and clean cut on the outside, but splinters of bone could be felt projecting from the inner table. An elastic catheter about the size of the external wound was used for purposes of exploration, as being less likely to injure the sound tissue. This passed about two and a half inches into the brain and pointed in the direction of the right orbit, but the ball could not be detected. On account of the swelling and discoloration about the eye it was thought that the ball had fractured the orbital plate, though no foreign body could be felt in the orbit. The wound was carefully dressed antiseptically, all spiculæ of bone projecting from the inner edge of the cranial wound being removed. The probing and removal of bone fragments caused no pain, but the patient moaned whenever the scalp wound was touched. Two or three hours later the child spoke a few rational words, and the mental faculties were gradually restored during the next few days. The temperature did not at any time rise above 101° F. There was no paralysis, and slight headache was complained of during the first few days only. In three weeks the child was out-doors at play. The right eye remained more prominent than the other, and at times there was double vision. After having made a number of examinations without result, Dr. Butterfield at length discovered the ball in the right orbit, between the inner wall and the globe of the eye. The patient being anæsthetized, an incision was made in the conjunctiva, and a thirty-two calibre ball extracted. The eyesight soon became normal, and the little girl attended school the following autumn with all her mental faculties unimpaired.

SCUTELLARIA LATERIFLORA IN THE TREATMENT OF ENURESIS.

Dr. A. H. Wimermark, of Cambridge, Ill., writes "Having read the excellent article on enuresis, by Dr. Stein, and the remarks of Dr. Willeford upon its treatment by rhus aromatica, I wish to contribute from my store of experience in the treatment of the same difficulty. Some two years ago I was advised by an old practitioner to use fluid extract of skullcap in a case in my own family, and the result was most gratifying. I have since employed it in several cases dependent upon nervous conditions only, and must say that results obtained have always been most satisfactory. A lad, twelve years of age, who would urinate from three to six times every night during his sleep, and had done so for several years, received 3 j. t. i. d. for two weeks, and was speedily and permanently cured. All the cases occurred in children."

Dr. Wimermark advises a trial, at least, of scutellaria when other remedies have failed. He disclaims any credit for originality in the use of the drug, as he says that it was recommended to him by another.

Progress of Medical Science.

Passage of Bacteria from Mother to Fœtus.—An experimental inquiry which may throw light on the relations of the fœtus to the mother in infectious diseases, has been communicated to the Académie des Sciences, by M. Pasteur for M. Koubassoff. The mode of procedure was to inject various cultivations of the bacillus anthracis under the skin of a pregnant guinea-pig. A careful examination of the fœtus was made after the death of the mother. It was found that the bacilli of charbon always pass from the mother to the fœtus; that the longer the time that elapsed between the inoculation of the pregnant mother and her death, the more numerous were the microbes in the fœtus; that more bacilli from virulent cultivations pass over than from an attenuated virus; that pathological conditions of the membranes of the placenta and fœtus hindered the passage of the bacilli from the mother to the fœtus; that inoculation of pregnant females with a too powerful vaccine nearly always caused the death of the fœtus; that inoculation with a virulent virus after the mother had been protected by satisfactory vaccination nearly always killed the fœtus—in other words, the fœtus cannot be protected by maternal vaccination.—*Lancet*, August 1, 1885.

Nasal Polypi and Epilepsy.—To the cases already cited of different forms of reflex epilepsy cured by removal of the exciting cause the following one of Fincke may be added (*Moniteur de la Policlinique*, June 7, 1885). A man, sixty-four years of age, was suddenly seized with numerous and repeated attacks of epilepsy, for which no other possible cause could be found than obstruction of the right nasal fossa by a mass of polypi resembling a bunch of grapes. These polypi were extirpated, and the convulsive attacks at once ceased, and had not returned at the time of the report, two years after the operation.

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PRESCRIPTION ACCIDENTS.

WHEN we consider the immense number of prescriptions that are daily written, it seems remarkable that mistakes occur so seldom. It is certainly to the credit of physicians that poisoning by the accidental misapplication of drugs at their hands is so rare. Continual carefulness is, nevertheless, obligatory on every one, as it is not only the novice who is liable to a chance mistake. There are not a few ways by which a prescription may fail in its mission before or after leaving the druggist. The chirography of professional men is frequently peculiar. We remember once, at a commencement, hearing a learned editor remark encouragingly to the graduating class that he hoped they had learned to read and write. He stated that much of his valuable time was given to deciphering the hieroglyphics of his correspondents, and further commented on the fact that while plain, legible handwriting was a possibility within reach of all, it was actually possessed by comparatively few. In connection with prescriptions the handwriting should be particularly distinct, but we fear that druggists may often have occasion to sympathize with the lament of the editor. It is especially in the writing of symbols that mistakes are liable to occur. A hastily written scruple and drachm may bear such a close resemblance as to escape the commission of a blunder only by chance. An inexcusable source of error is in a lack of sufficient explicitness in the written directions on a prescription. Such vague expressions as "use as directed," "a teaspoonful when required," etc., are direct challenges to accident. Patients find it very difficult to remember directions, and easily become confused in the matter of taking drugs. The metric system is a possible source of accident in the hands of those not thoroughly familiar with its use. A patient in a neighboring city lost his life through an error of punctuation in a prescription written in the metric system. Every physician should acquire the habit of carefully reviewing the prescription after it has been written and before allowing it to leave his hands. It is probably not unjust to state that more mistakes in connection with prescriptions are made by druggists than by physicians. With the more careful training that is now being given to graduates in pharmacy, this source of error will be reduced to a minimum. In this connection we cannot fail to notice the custom of counter-prescribing that is more extensively carried on than is supposed by many physicians, and is a fruitful source, not only of serious accidents, but of lesser grades of malpractice. A promising young man in this city lost his life, not many months ago, from a druggist's clerk dispensing morphine by mistake for quinine. The number of deaths in young children from the opium contained in soothing syrups and like nostrums, so often given over druggists' counters, will never be known. Indeed, whenever any drug or combination of drugs is dispensed, there should be a written memorandum made of it by some responsible party. The formula of any mixture used by a physician can be seen at the drug-store where it has been compounded. There should likewise be a law compelling the owners of quack remedies and nostrums to publish the formula on each bottle. This would not only deprive many temperance people of their toddy, but likewise succeed in driving these charlatans from the field. We think it would be to the advantage of physicians, particularly in office-practice, to dispense the pills, triturates, and globules now made in such perfection by many reputable chemists. It is high time for many physicians, as well as the laity, to appreciate the fact that sugar of milk does not mean homœopathy, and that a globule may contain a physiological and yet decidedly effectual dose of a drug.

ANTIPYRESIS.

IT is only within the last quarter of a century and since the introduction of self-registering thermometers, that any precise observations upon the temperature in disease have been possible; and the science of medical thermometry has, therefore, only within comparatively recent times assumed the rank to which it is entitled by reason of its importance clinically, and as an indication for rational therapeutics. The last decade has seen wonderful advances in this direction, and hand in hand with these has proceeded the discovery of many new, and oftentimes most efficacious, antipyretic remedies. Many of these latter are at the same time so-called specifics, not only reducing the temperature, but also curing the disease of which the fever is but one of the manifestations. Quinine and salicylic acid are examples of remedies possessing this double action. Among the latest of the antipyretics which have been used sufficiently to demonstrate their practical utility are kairin, antipyrin, and thallin.

At the fourth German Congress for Internal Medicine, held at Wiesbaden, in April of the present year, a very interesting discussion arose upon this subject, and was participated in by Filehne, Liebermeister, Jacksch, Strümpell, Rossbach, Stintzing, Heubner and others. The general consensus of opinion was in favor of cold bathing as a means of reducing excessively high temperatures, in preference to the exhibition of internal antipyretic agents. It was argued that it was not simply and solely in the elevation of body heat that the danger of fever lay, but that there were many other complications which were equally, or even more, prejudicial to the patient's safety. In typhoid fever, for example, by far the greatest number of deaths resulted from the anatomical changes incident to the disease itself, or from secondary complications not immediately dependent upon the primary cause of the disease, and but comparatively few were directly attributable to hyperpyrexia. Somewhat in the same way as the antiseptic treatment of wounds has for its object the

warding off of complications rather than the acceleration of the reparative process, so the treatment of a continued fever is to be directed chiefly to the prevention of secondary evils rather than to the reduction of temperature alone. From this point of view the internal antipyretics are of little value. They reduce the temperature, it was argued, but they do not always exert a beneficial influence upon the mental condition; indeed, delirium is often increased, the appetite is frequently destroyed, respiration does not become more free, etc. But very different is the action of cool baths; they are truly prophylactic in their effects. But an elevated temperature is not the chief or the only indication for baths. The principal advantage of this mode of treatment is indicated by the effects of the baths upon the nervous system, respiration, the skin, the kidneys, etc. That at the same time the temperature is lowered is perhaps to be regarded as adding to the value of baths, but it is not in this that their chief value consists.

In certain cases, it was acknowledged, there is a very great danger from the excessively high fever, a danger that must be met promptly if death is to be averted. But here, Liebermeister and others contended, recourse should be had at once to baths, for internal antipyretics required time for their action, and if they were first tried and found wanting it might then be too late to derive any benefit from the direct abstraction of heat by cool or cold water.

But the antipyretic drugs were not without their supporters. Antipyrin and thallin were the most favored, kairin being pretty generally discredited by reason of its occasional violent action. Stintzing, of Münich, was among those who spoke most favorably of these remedies. He said that in Münich, antipyrin had been used very extensively in every form of febrile disease, and often with the most strikingly beneficial results. The course of typhoid fever when antipyrin was used was in striking contrast to that under the former methods of treatment. There was no headache, the mind was clear, the patient made no complaint, and his appearance was almost that of a man in perfect health. He thought the reason that some of the other speakers had not seen such favorable results was that they did not exhibit the medicament in sufficiently large doses. In Münich antipyrin was given sometimes in doses of as much as four and one-half drachms per diem, and in general the rule was to give fifteen to thirty grains when the temperature was from 100° F. to 102° F., and when it exceeded 102° F. a dose of thirty to forty-five grains or over was administered. With such doses he often obtained almost complete apyrexia, lasting for a considerable period. Unpleasant effects, such as chills, vomiting, exanthemata, etc., were observed only in a very few instances.

Thallin, also, had lately been extensively employed in the Münich clinic. In doses of four grains it caused a very prompt lowering of temperature, but its effects were not lasting, and within three or four hours the fever had usually attained, or even exceeded, its previous height. Thallin was not so well borne as antipyrin, and as it excited profuse sweating the patients were often considerably weakened.

While it may be true that the most certain and the safest antipyretic is the cool or cold bath, it is not always the most practicable. It necessitates more or less disturbance of the patient, and it is furthermore not always safe, being sometimes followed, even in experienced hands, by most alarming depression. It is also oftentimes impossible, in private practice, to carry out this mode of treatment as it should be carried out in order to be of much value, and we cannot, therefore, afford to discard antipyrin and other internal antipyretics, which, despite their occasional unpleasant effects, are often of inestimable benefit and not to be replaced by any other modes of reducing temperature as yet known to us.

MEDICAL TREATMENT OF UTERINE FIBROIDS.

Dr. Thomas More Madden, in an address delivered recently before the British Gynecological Society, calls attention in a striking and pertinent way to the value of expectancy or of positive medical treatment in dealing with uterine fibro-myomata. Uterine fibroids do not necessarily impair health seriously or cause death; they sometimes spontaneously disappear, are often arrested in their growth, and appear in some instances to respond to medical treatment. Bearing this in mind, there should undoubtedly be a greater conservatism as regards surgical procedures than at present exists.

As illustrating the large view taken by the advocates of oöphorectomy and hysterectomy, we find in Mr. Lawson Tait's "Address on One Thousand Abdominal Sections" a list of 99 cases of removal of uterine appendages for myoma, with 7 deaths; hysterectomy in 54 cases, with 19 deaths; and one enucleation of a myoma, which proved fatal. Thus we have in all 124 completed abdominal operations bearing immediately on our present subject. From the same statistics it may be gathered that Mr. Tait has, moreover, had no less than 30 incomplete operations of this kind, 17 of which were in cases of uterine, or unspecified, but non-ovarian tumors, in which, after the opening of the abdominal cavity, further procedures had to be abandoned. Of these incompleted operations, Mr. Lawson Tait thinks that he "may speak with a certain amount of satisfaction," though from what he derives this contentment we are, with Dr. Madden, at a loss to understand, as his mortality in them was fifty per cent.

As further illustrating the *cacoëthes operandi* prevalent among abdominal sectionists anxious to reach their hundredth or thousandth case, Dr. Madden cites Dr. Savage, who, in reporting upward of a hundred cases of abdominal section undertaken within a year, boasts that he performs this operation in every case which he has "the opportunity of operating on," without "the slightest attempt at the selection of cases, such as choosing the most suitable and rejecting those which did not seem to promise to be successful."

Dr. Keith has recently recorded 38 cases of hysterectomy, with only 3 deaths. In the *American Journal of Obstetrics* Dr. Bigelow has collected, from all available sources, records of 359 similar operations, of which 227 resulted successfully while 132 patients died. With regard to this mortality, greater than one in every three operated on, we may well, says our writer, ask the question, which was suggested to Dr. Keith by his own more successful practice, viz., does a mortality of eight per cent. justify an operation for a disease that, as a rule, has

only a limited active life, that torments simply, and that only for a time, though of itself it rarely kills?

According to Professor Schroeder, any uterine fibro-myoma, however extensive or wherever situated, may be removed by laparotomy or partial hysterectomy with the aid of the elastic ligature. Of those on whom Schroeder thus operated, he lost in his first series of cases thirty per cent., and in his second series twenty-two per cent. These numbers are significant and carry their own lesson with them.

As regards oöphorectomy for fibroids, it is certainly true that the exact measure of its usefulness and the proper indications for its employment are far from being satisfactorily established. In actively growing tumors occurring in comparatively young subjects, with profuse hemorrhage, the operation is probably justifiable. But the removal of the ovaries merely for the arrest of hemorrhage consequent on fibromata is not to be countenanced until other and safer methods of checking metrorrhagia have been fully and unsuccessfully employed. Again, Dr. Madden asserts that this operation is not generally advisable in the case of quiescent fibroids largely occupying the abdominal cavity in older patients.

Turning from the subject of hysterectomy, Dr. Madden first discusses other operations, and recommends highly the substitution of enucleation both for sub-mucous and intramural fibroids, or indeed for all fibro-myomata. We are inclined to think that Dr. Madden is very much behind the times, at least so far as American gynecology is concerned, in thus urging the wider adoption of enucleation for fibro-myomata.

As for the medical treatment, Dr. Madden is on the whole disappointing. He believes that by drugs the size of the tumor can often be reduced or its progress in growth arrested, but he evidently is not familiar with all the measures utilized for this purpose by American practitioners. The use of ergot and sulphuric acid, of Dover's powder and gallic acid, the systematic administration of iodide of potassium and hot-water irrigations, in this country the drinking of hot water, combined with a meat diet, the use of clay applications, and of electrolysis are known to the profession, and have been endorsed by good authority as efficacious.

MASSAGE OF THE THORACIC ORGANS.

MECHANICAL therapeutics has acquired for itself in recent years a settled place in medicine, and its advocates are constantly endeavoring to enlarge its scope and widen the field of its usefulness. In the *Allgemeine Medicinische Central-Zeitung*, No. 20, 1885, Dr. Emil Schlegel reports some cases of pleuritic effusion, in which absorption of the fluid would appear to have been induced or accelerated by repeated blows upon the chest-walls. The closed fist was used, the blows being struck by a motion of ulnar flexion at the wrist-joint, combined with supination of the hand. The ball of the little finger came in contact sharply with the ribs and rebounded, the hand turning back into radial flexion and pronation. About two blows were made in a second, or six hundred in the space of five minutes. Two sittings were had each day. Under this mode of treatment a successful result was obtained, in some cases in a much shorter period than usual. The author has tried "concussion strokes" (*Erschütterungsschläge*) only in the case of pleuritic effusions, but he believes that it might be equally useful in promoting absorptions in other portions of the body, as the intracranial cavity, spinal canal, etc., which are inaccessible to the ordinary manipulations of massage.

MEDICAL WIT AND HUMOR.

THE traditions of medicine are of a grave and sober kind. In the history of our art there is no jest, and in the lives of great physicians of the past there is only a record of serious work. We cannot fancy a smiling Hippocrates—we know that his aphorisms are no "joke;" no one can think of Galen "holding both his sides," and did any great physician from Aracætus to Sydenham leave us a *bon mot*? There have been some things, it is true, handed down to us as great jests. It is recorded as amusing that Dr. Caius in his old age sustained life by suckling a wet nurse! There is a touch of humor in the story of how Erisistratus cured the Prince Antiochus of a wasting passion for his mother-in-law—a type of disease which has now disappeared.

We read in ancient records of a physician, Dr. Hartley, who procured a grant of $25,000 for the secret of a cure for vesical calculus. He took this cure himself until he had consumed therewith two hundred pounds of soap—after and despite which he died of stone in the bladder! In the two hundred years since this record no one till now has thought to ask if the doctor did not have a soap-stone. It was a great philosopher, and a man, we confess, with a large sense of humor, who proposed a "Plan for Extirpating Venereal Disease" which consisted in nothing more or less than in "mercurializing the whole world!"

It may be questioned whether the statue of Taliacotius, nose in hand, may not be classed as a mediæval joke of a permanent and solid character. But the only physician of olden times who has left a record for humor as well as medical skill is Dr. William Butler, who was styled the Æsculapius of his age. It was Butler who ordered a lethargic parson to be put into the warm carcass of a newly-killed cow. One of the choicest specimens of this doctor's old-time humor is recorded in letters from the Bodleian. "A Frenchman came one time from London to Cambridge purposely to see him, whom he made stay two houres for him in his gallery, and then he came out in an old blue gowne. The French gentleman makes him two or three very low bowes downe to the ground; Dr. Butler whippes his legge over his head, and away goes into his chamber, and did not speak with him." Again, "A gent. with a red, ugly, pimpled face came to him for cure. Said the Dr.: 'I must hang you.' So presently he had a device made ready to hang him from a beam in the roome; and when he was e'en almost dead he cuts the veins that fed these pimples, and lett out the ugly black blood, and cured him."

It will probably not be denied that the sense of humor of our medical forefathers was not particularly keen or over-cultivated, though we would not doubt that they cracked their jokes and lived as happily as most people.

But now, forsooth, the sombre mask is being often put aside, and in the place of the staid and learned Hippocrates, we see a smiling philosopher. Of late years there has come to us from Paris and the West a

perennial flow of "Anecdotes Médicales" and works of medical poetry or medical jests. We think that perhaps the matter is being a little over-done. There is no doubt a large craving for the amusing, but the taste still needs a little cultivating. It is surprising to observe the extensive travels of some feeble and rachitic little jest through the pages of medical periodicals. And, like the body, it renews itself every seven years. We have been criticised for intimating that there is no wit in medicine. This is putting it more comprehensively than we intended; but certainly the popular and persistent itineracy of medical Joe Millerism, and the dreary average of works illustrating medical humor, justify in large measure our estimate.

News of the Week.

HISTORY OF THE VERMONT MEDICAL COLLEGE.—Mr. Henry S. Dana, Woodstock, Vt., who is writing a history of the Vermont Medical College, or "Clinical School of Medicine," as it was first called, would like to borrow a copy of any of the catalogues of the Clinical School of Medicine, or Vermont Medical College, from 1830 to 1839; also, a copy of Rev. Mr. Parker's "Sketch of the Life of Dr. David Palmer," delivered in lecture term, 1841.

THE LEHIGH VALLEY MEDICAL ASSOCIATION.—The fifth annual meeting of this society took place at Quakertown, Pa., on Wednesday, August 19th.

TEXAS PHYSICIANS AND THE INTERNATIONAL CONGRESS.—At a special meeting of the Dallas County Medical Society, on July 25, 1885, the following preamble and resolutions were unanimously adopted with reference to the recent action of the American Medical Association at New Orleans.

Whereas, The American Medical Association at its meeting in Washington City, in May, 1884, recognized a general desire of the medical profession of the United States, by adopting a resolution under which a committee was appointed, whose duty it should be to extend an invitation to the International Medical Congress, shortly to assemble at Copenhagen, to hold its next meeting in 1887 at Washington City; and

Whereas, The said committee, by the letter and spirit of this resolution, was fully empowered to act, not only as a committee of invitation, but as an executive committee as well; and

Whereas, The said committee, in pursuance of the objects of the above-mentioned resolution, and duly exercising the unlimited authority delegated to it, enlarged its membership and otherwise provided for the successful holding of an International Medical Congress at Washington City in 1887, all of which arrangements were considered by us as judicious and, contrary to what has been charged by some, wholly disinterested as to personal or local aggrandizement; and

Whereas, The American Medical Association, at its last meeting at New Orleans, did, in our judgment unwisely and untimely, virtually rescind its former action, which reactionary movement has deranged, if not indefinitely suspended, the work of the original committee, which was satisfactorily progressing, and created an indifference to the Congress among the recognized leaders of medical thought and interest throughout the country; and

Whereas, There are those who persist in urging the so-called justice of their claims for an organization of the International Medical Congress on a territorial basis, which unfortunate idea has been unwisely further extended by some members of the profession in Texas, in a manner calculated to arouse a sectional prejudice, which has little, if any, existence in our State; therefore,

Be it resolved, That the Dallas County Medical Society deplores what must be considered the present interregnum in the affairs of the contemplated International Medical Congress, brought about, as we believe, by an ill-considered and hasty action of the American Medical Association, at the New Orleans meeting before mentioned: that this Society was fully satisfied with the work of the original committee, which was composed of able, eminent, and conscientious members of the profession; that this Society repudiates any attempt to inject a sectional feeling into a purely professional matter, which has reference to scientific investigations only, and that said attempt, if offered in behalf of the medical profession of Texas, is, in the opinion of this Society, both unauthorized and gratuitous, and that, looking beyond a narrow-minded policy of personal aggrandizement and sectional interest, we heartily commend the recent action of Philadelphia and New York brethren, as well as those elsewhere, who have retired from the Congress until a more dignified and unselfish view of the arrangements can be had; and we pledge them our hearty support and good will in their efforts to advance the interests of the American medical profession in future meetings of International Medical Congresses, where the truly representative medical abilities of our country shall be enlisted, uncontrolled by geographical lines or personal preference.

GOODWIN E. PETERS, M.D.,
Secretary.

PESSARIES.—Dr. Samuel W. Francis says that pessary came originally from the Latin *malus—pejor—pessimus!*

THE PATIENT NOT DEAD WHEN DR. DUDLEY LEFT HIM.—Dr. A. Palmer Dudley, of this city, writes: "In THE MEDICAL RECORD of August 8th, page 163, Dr. John F. Ridlon, in the report of a case of thrombosis of the left coronary artery, makes use of these words: 'At about 3 P.M. the patient's heart stopped, and Dr. Dudley, believing him dead, left him. A few moments later, however, he revived, and was seen by another physician.' This is not correct. The simple facts in the case are these: I did conduct the man to his home and placed him in bed. I stepped from the room for a few moments, and on my return found him with heart and respiration ceased and features cyanotic; by artificial respiration I succeeded in resuscitating him, and half an hour after, under a hypodermic injection of morphia, left him very comfortable."

MEDICAL CONGRESS AT ANVERS.—The sixth annual reunion of Belgian physicians will take place this month at Anvers, on the occasion of the industrial exposition to be held there. The following question is the one which will form the chief subject of deliberation: "What

are, in the present state of epidemiology, the most practical measures of international prophylaxis which can be adopted, especially in Belgium, against pestilential diseases?"

In Memory of Dr. Panum.—A committee has been organized in Copenhagen to solicit subscriptions for the foundation of a memorial to the late Dr. Panum, whose death occurred on May 2d of the present year. It is proposed by the committee to obtain a bust of the deceased professor, to be placed in the lecture-room of the physiological laboratory. In the committee's appeal, published in the *Hospitals-Tidende*, it is stated that subscriptions may be sent to any of the members, or to Jacob Lund, Kronprinsensgade, No. 7 K, Copenhagen, Denmark.

A Bust of Thullier, the member of the French cholera mission to Egypt in 1883, who died of the disease, contracted while in the discharge of his duties, has been placed in the hall of the superior *école normale*.

Correction.—Dr. Wm. Manlius Smith, of Syracuse, N. Y., writes that he was not the author of the report on infection from imported rags, made at the recent meeting of the New York State Board of Health (The Medical Record, August 15th, page 185). The Health Officer of the port of New York, Dr. Wm. M. Smith, formerly of Angelica, Alleghany County, is the gentleman who made the report.

The Sanitary Condition of the Isthmus.—It appears that Colon is in a terrible way, and a perfect plague seems to have stricken the place. There are sometimes as many as twenty-five deaths per day. The population is less than ten thousand. Mr. Ackerly, the roadmaster of the Panama Railroad, died on July 23d, of hemorrhagic malarial fever. He was ill but forty-eight hours. The French consul, Mr. Paul Savelli, died of yellow fever. Several canal employees died from yellow fever, and about fifty deaths from this disease have been recorded during one month. It must be borne in mind that the terrible condition of the Isthmus just now is directly traceable to the absolute neglect of all the principles of sanitation.

The Congo Dangerous for Europeans.—An interview with a member of the International Congo Commission confirms the statement that fifty per cent. of the European employees in the Congo region have died.

In Favor of Cremation.—Nearly one hundred citizens of Los Angeles have given their names to a committee favoring the organization of a cremation association there, and the immediate erection of a crematory. Sacramento, more than Los Angeles, needs such sanitary reform. Her situation is such that cremation should be specially favored by her people, and burial discarded. From Paris comes the report that the Prefect of Police concurs with the decision of the municipal authorities favoring the cremation of dissected bodies from the hospitals, on the ground not only of economy, but that such a course will relieve the crowded cemeteries.

A Fever Hospital for Sydney, Australia.—The epidemic of typhoid fever in Sydney and the suburbs is on the increase, and is causing a good deal of uneasiness. At a recent meeting of the Directors of the Prince Alfred Hospital, Sydney, a letter was read from the secretary of the medical board, giving reasons for considering it necessary that the admission of typhoid cases should not exceed one-quarter of the number of patients in the medical wards of the institution. The proceedings that have arisen out of this question are to be brought under the notice of the Government, with a strong recommendation from the board as to the establishment of a fever hospital.

Koch's Successor in the Imperial Board of Health.—On assuming the chair of hygiene at the University of Berlin, Koch resigned as active member of the German Imperial Board of Health. He remains an "extraordinary" member of the board, however. Dr. Gaffky has been appointed in his place, and assumes charge of the department devoted to bacteriology.

Physicians on Russian Railways.—The *Vratch* states that the Orel-Vitebski railway has arranged that one of the guards of each train shall be a *Feldsher* (hospital sergeant), and shall wear a badge indicating his profession.

The Bradshawe Lecture was delivered by Dr. Goodhart at the Royal College of Physicians on August 18th. The subject was "Morbid Arterial Tension: a Review."

A Medical Squabble in New Zealand.—The Colonial Secretary having issued a new regulation, the object of which is stated to be to prevent a certain hospital being filled up with cases which should not be sent to it, the medical men connected with the institution consider themselves insulted, and demand the withdrawal of the insinuation.

Deaths of German and Austrian Professors.—Dr. Hermann V. Boeck, Professor of Pharmacology in Munich, has died at the age of forty-two. From Vienna the death is announced of Professor H. W. Reichardt. It is stated that he committed suicide by hanging himself in a fit of temporary insanity. He was fifty years old. Dr. Faludy, the well-known physician for children's diseases, died at Buda-Pesth, aged forty-six.

A Memorial to Pacini.—We learn from the *British Medical Journal*, August 8, 1885, that a committee has been formed at Florence for the purpose of collecting funds for a memorial to the late Professor Pacini. It has issued a circular which contains the following statement: "Honor to the memory of a great citizen, destined to remind posterity of his virtues and his labors, is a duty which the nation that gave him birth is bound to discharge. From such men proceeds an example which acts as a noble oration, preaching great deeds to future generations. Italy has such a duty to perform in memory of Philip Pacini, who discovered the tactile corpuscles, who, since 1854, has devoted himself to profound and original researches on the specific nature of Asiatic cholera, and who has introduced a method of artificial respiration which repeated experiments have proved to be the best for saving life. It is for Italians, then, to perpetuate the fame of this man, who, springing from a humble origin, has succeeded, by force of will, in gaining universal renown in anatomy and biology; who, after a life of exemplary activity, in the course of which he never

thought of his own interests, but rather considered the welfare of humanity, died poor, leaving to his successors nought but certain precious documents of high merit, such as the 'Structure of the Retina,' 'The Electrical Organ of the Gymnotus,' and 'The Extra-vascular Circulation of the Blood.'" The subscribers to the memorial will be informed of its nature, which will be decided upon when the entire subscriptions are received. The Committee consists of Professor G. Pellizzari, President; Dr. Aurelio Bianchi, Cavalier Dr. Luigi Billi, Cavalier Antonio Civelli, Cavalier Dr. P. Cresci-Carbonai, Cavalier Dr. Cosimo Franceschi, Cavalier Dr. C. Frascani, Dr. L. Giuntoli, Dr. G. Marcacci, Dr. F. Settimelli, Professor A. Tafani, Professor A. Targioni-Tozzetti, Professor Pasquale Villari, Senator; Dr. Carlo Stacchini, Signor Olinto Squarcialupi, Secretaries.

The Hospital at Port Said.—The Gordon Memorial Hospital has been abandoned, but the Port Said Hospital has been materially improved; it has been retiled, whitewashed, ventilated, and otherwise rendered cleaner and more habitable. Latrines will be erected so soon as it is determined whether the dry-earth system or the pneumatic cart should be adopted.

The Cholera.—There appears to be little or no abatement in the ravages of the cholera in Spain. It is impossible to obtain accurate figures, but its daily mortality is little short of 1,800, with an average of new cases amounting to over 4,000.

In Marseilles the epidemic appears to be still on the increase. Twenty-seven deaths from cholera were reported on August 18th. Since the 10th inst. 130 patients have been admitted to the Pharo Hospital, 55 have died, and 10 have been dismissed; 65 remain in the hospital. Twelve deaths occurred in Salon, one in Aubagne on the 18th inst. Several fatal cases have also occurred at Toulon. A letter from Saignon reports that 600 French soldiers have died of cholera in Formosa and the Pescadores; that the hospitals are overflowing with sufferers, and that the epidemic is increasing. In Paris active preparations are on foot to exclude the dreaded scourge.

Dr. Reichard the Explorer Reported Dead.—Advices from Zanzibar state that Dr. Reichard, the sole survivor of the German international exploring expedition, is reported to have been killed while fighting the natives during the progress of the Ugogo expedition.

An International Pharmacopœia.—The German, French, and American Pharmacopœias have all been recently issued in a thoroughly revised form. The Belgian Pharmacopœia is just out, and the British Dispensatory is soon to follow. It is hoped that it will appear before the International Convention, called to consider the feasibility of establishing a universal Dispensatory, will have been held.

Professor Gussenbauer's Act of Charity.—The well-known Professor of Surgery at Prague, Dr. Gussenbauer, casually met a medical student about to enter his lecture-room. The professor was struck with the pallid appearance of the student. Questioned if he were ill, the student gave no definite reply. Gussenbauer asked him to step into an adjoining room, and having ascertained that one of his lungs was considerably damaged, advised the student to proceed without delay to some Alpine health resort. The student sadly answered that this would be an impossibility, since he was constrained to support himself by teaching. The professor then told him to call at his house on the following day. There he was handed an envelope containing a one-thousand "gulden" note, and a "bon voyage" from the generous professor.

The Sixteenth Annual Meeting of the German Anthropological Society was held at Carlsruhe, from August 6th to 8th. Wagner, Ranke, Virchow, Waldeyer, Rüdinger, Bissenger, V. Torök, and Mr. Henry Schliemann participated in the proceedings.

Death of Dr. Bowling.—Dr. W. K. Bowling, one of the ex-Presidents of the American Medical Association, and one of the most eminent members of the profession in the Mississippi Valley, died at his residence on Cumberland Mountain, near Nashville, Tenn., on August 6, 1885. He was seventy-seven years of age.

A Hopeful View of the Congress.—The *Journal of the American Medical Association* enjoys the prerogative of being almost alone in its optimistic forecast of the prospects of the International Medical Congress. In its issue of August 15th, it says editorially: "Evidences are not wanting that the principal performers in the great comic play of "Much Ado About Nothing," which was commenced so brilliantly on June 29th by twenty-eight members of the profession in Philadelphia, are becoming weary of their work. Some who were induced to join in the play from the first impulse have already withdrawn, and others are evidently preparing to follow. Dr. John H. Packard, who was appointed Secretary-General of the Congress by the Committee of Arrangements at the meeting in Chicago, and whose name was published as one of the twenty-eight who declined to accept any place in the revised organization, has recently withdrawn his declination and accepted the position. As an offset to the other twenty-seven who started the scheme of obstruction and factious opposition in that city, we have the names of seventy prominent members of the profession in the same city who have freely endorsed the action of the American Medical Association, and pledged their support to the organization of the International Medical Congress of 1887. Among them are the names of teachers and authors as eminent and as well-known both in this country and in Europe, as any of those who so hastily declined. To the same endorsement and pledge are appended the names of several hundred prominent and well-known members of the profession in other parts of the State of Pennsylvania. . . . The idea that the Committee of Arrangements will not be able to complete the work of preliminary organization at its coming meeting on September 3d, or that the vacancies in the several sections cannot be filled with men of the highest standing and ability, is simply absurd." *Nous verrons*, is the only comment we can offer on the above.

Dr. John Ten Brook, of Paris, Edgar County, Ill., one of the oldest practitioners in the State, died at his residence, on August, 8, 1885, aged seventy-seven years.

Death of Dr. William Gaston Bulloch.—Dr. Bulloch died recently in Savannah, Ga., in the seventy-first

year of his age. He was the son of John Irvine Bulloch, and great-grandson of Governor Archibald Bulloch, of Revolutionary fame. After obtaining his degree he went to Europe to further prosecute his professional studies, the greater part of his time being spent in the hospitals of Paris. He then returned to the United States, and settled in practice in his native city. He was President of the Medical Association of Savannah, and also, at one time, of the Georgia State Medical Association. He became a member of the American Medical Association in 1851. He was one of the founders of the Savannah Medical College. He was a surgeon in the Confederate army during the late civil war, was alderman of Savannah for two years, and was physician to the city jail from 1877 to the time of his death.

THE BALY MEDAL, presented by the Royal College of Physicians of London, has been awarded to Mr. W. Kitchen Parker, F.R.S.

VIVISECTION IN AUSTRIA.—A movement is on foot in Austria to abolish or restrict vivisection through a governmental decree. The chances do not appear to favor the sentimental anti-vivisectionists.

PROFESSOR HUXLEY.—It is announced that Professor Huxley, F.R.S., has agreed, at the request of the Committee of Council on Education, to continue to act as Dean of the Normal School of Science and Royal School of Mines at South Kensington, and also to be responsible for the general direction of the biological instruction therein.

A NEW MYDRIATIC ALKALOID.—M. Crouzel has isolated a body having all the properties of an alkaloid from the mandrake (Mandragora officinalis). This body forms a sulphate which is crystalline. A solution of this salt was found to have marked mydriatic effects on the eye of a rabbit.

DEATH OF PROFESSOR SCHLAGER.—Professor Ludwig Schlager, Director of the Wiener Landes-Irrenanstalt, one of the most distinguished alienists in Austria, died at Gastein on the 24th ult. He was fifty-seven years of age.

CALVES' VACCINE NOT LIABLE TO COMMUNICATE TUBERCULOSIS.—M. Straus finds that the proportion of tuberculous calves does not reach 1 in 100,000. So the danger of tuberculosis in obtaining vaccine from these animals is practically nil.

A TAPE-WORM IN A LAMB.—An Oregon farmer recently killed a lamb. Through an accident he cut a hole in the intestines, when he saw a tape-worm protruding. He extracted it and found it over thirty feet in length. It must be quite exceptional for a tænia to find a lamb a congenial host.

FOR THE CURE OF CORNS.—M. Vigier recommends the following: Salicylic acid, 15 grains; alcoholic extract of cannabis indica, 7½ grains; alcohol (90°), 15 minims; ether (62°), 37½ minims; flexible collodion, 75 minims. Mix and preserve in a closely corked vial. The corn is to be painted thoroughly with this mixture every second day for a week. At the end of this time, it is said, the corn can be readily expressed by pressure of the fingers.

Reviews and Notices.

A TEXT-BOOK OF MEDICAL PHYSICS FOR THE USE OF STUDENTS AND PRACTITIONERS OF MEDICINE. By JOHN C. DRAPER, M.D., LL.D., Professor of Physics and Chemistry in the Medical Department of the University of New York. Pp. 733. Philadelphia: Lea Brothers & Co., 1885.

THE author regrets in his preface that the study of physics has been regarded in this country as of so little importance in the curriculum of medical study. He regards our educational literature as sadly deficient in this respect. Hence he has been led to place before the public the substance of his lectures in this department of science, delivered during many years at the University of the City of New York.

That this work will greatly facilitate the study of medical physics is apparent upon even a mere cursory examination. It is marked by that scientific accuracy which always characterizes Dr. Draper's writings.

Its peculiar value lies in the fact that it is written from the standpoint of the medical man. Hence much is omitted that appears in a mere treatise on physical science, while much is inserted of peculiar value to the physician. Of special value are the chapters on Physiological and Therapeutical Effects of Variations in Density of Air, and Electro-biology. An interesting section is inserted on Ultra-gaseous or Radiant Matter. Included in the section on the Microscope are full directions for hardening tissues, cutting sections, staining, injecting, etc.

ON THE WASTING DISEASES OF INFANTS AND CHILDREN. By EUSTACE SMITH, M.D., London. Fourth Edition. New York: William Wood & Co. 1885. Wood's Library of Standard Medical Authors.

THE fourth edition of Dr. Smith's work is but little changed from the third, which latter, however, was, at the time of its publication, largely recast and rewritten. The wasting diseases of children described by our author are simple atrophy, chronic diarrhœa, chronic vomiting, rickets, inherited syphilis, mucous disease, worms, chronic pulmonary phthisis, and caseation of lymphatic glands. The separation of these conditions into special classes is necessarily somewhat arbitrary, but we feel no desire to complain since it has some practical value. Dr. Smith prefaces his work with the usual discourse upon infant hygiene and infant feeding. His remarks are sensible and judicious, though he perhaps lays less stress upon artificial feeding than its widespread practice demands. At the close of his work is a chapter on the diet of children in health and disease. This contains many tables, and will be found very useful for reference. These tables, however, might very well be improved by the addition of articles in use in this country. The "Mucous Disease," to which a chapter is devoted, is a new thing in nosology, and is, we believe, the child of Dr. Smith. It is a hypersecretion of mucus from the alimentary tract, occurring especially after whooping-cough and at the second dentition. Unquestionably it is a clinical entity, and our author's description of it deserves attention. The chapters on the other wasting diseases, of which we have given a list, are all profitable reading, and we can heartily commend the book as a most useful one, and as having the virtue also of not being voluminous or dry.

COMFORTING NEWS FOR THE SMALL BOY.—Dr. Zulinski, of Warsaw, has been conducting a series of experiments on men and the lower animals to determine the effects of tobacco-smoke upon the system. He found that it was poisonous when inhaled in sufficient quantity, but states that cigarette smokers absorb less of the injurious principles than do cigar-smokers, and pipe-smokers least of all.

Reports of Societies.

British Medical Association.

FIFTY-THIRD ANNUAL MEETING.

Held at Cardiff, on Tuesday, Wednesday, Thursday, and Friday, July 28, 29, 30, and 31, 1885.

REPORTS OF SECTIONS.

SECTION OF OBSTETRIC MEDICINE.

WEDNESDAY, JULY 29TH—FIRST DAY.

DR. GERVIS, President, in the Chair.

This Section has been of even greater interest than usual. Several important subjects have been discussed, great interest has been manifested in the discussions, and a larger proportion than usual of leaders in obstetric science and practice have been present.

After the delivery of the Presidential address the first paper taken was

ON THE OCCASIONAL LATENCY AND INSIDIOUSNESS OF GRAVE SYMPTOMS IN CONNECTION WITH THE PUERPERAL STATE,

by DR. W. O. PRIESTLEY, of London. Dr. Priestley said serious disease, when occurring after delivery usually showed itself within ten days after the day of confinement. Relying on this, in maternity hospitals, women were allowed to leave in ten or fourteen days. But more tedious cases occurred. He related a case in which in a young wife the uterus did not contract well after delivery. The patient, however, appeared to progress favorably and was on the sofa by the eleventh day. Soon after she was allowed to leave the room and go into the adjoining one. On the twentieth day vomiting came on, and by the third week she was unable to put her feet to the ground. There were pains in the limbs, swelling of the joints, and general symptoms of acute rheumatism. There was nausea, indigestion, and the breasts swelled. The temperature was high and the pulse accelerated. The abdomen was tympanitic. This case occured some years ago. Several other physicians saw the case, among these were Dr. Playfair, and the late Sir James Simpson, who came from Edinburgh for the purpose. The patient died thirty-eight days after delivery. In a second case, Dr. Priestley attended and took leave of the patient at the end of the month, convalescence being apparently complete. In a few days he was called in again, and finding the patient not so well advised her to go out of town. Serious eye mischief came on and one eyeball suppurated and burst, with, of course, total loss of sight in that eye. The patient slowly recovered. A third case was that of a young married lady, aged twenty-three, whom he attended in October, 1875, when she was delivered of her second child; forceps were used; the uterus contracted well and it was observed that there was but little hemorrhage. In a few days, however, it was observed that the womb was again large. There was no tenderness on pressure, and no fever or general symptoms. In a few days the patient complained of pain, and one day a sharp pain suddenly came on in the calf of one leg. A phlegmonous swelling formed, in which fluctuation could after a time be distinguished. The late Mr. Campbell de Morgan saw the patient in consultation with Dr. Priestley. When the presence of pus was established, Mr. Morgan incised the swelling and a considerable quantity of pus escaped. In a fourth case the patient was, at the time of her confinement, in rather a poor state of health. She had sustained a great grief a few months previously by the death of her mother. This had made her melancholy and indisposed to take exercise. The labor lasted forty-eight hours. There was fair contraction of the uterus, but dilatation followed. The patient complained of a sharp pain in the chest and pains down one thigh. A poultice was applied to the chest, and quinine given internally. These symptoms were relieved, but three weeks after delivery the uterus was, on palpation, found to be still larger. At the end of the month, the only symptom of which the patient complained was recurring neuralgia. At the end of the fifth week she suddenly felt very faint one day. This passed off, but in a few days she was out and got her feet wet. In the seventh week the patient was attacked with agonizing pain in the right groin. On examination, a swelling was found in the right iliac region. The pulse was 120, temperature 103° F., and the urine was loaded with urates. Pains in the ankles followed; then the wrists became involved. The hands and wrists were kept wrapped up in cotton-wool; there was a curious metastasis from one to the other; sometimes one hand could be moved and sometimes the other. This condition lasted a week; the patient then complained of a pain in the left side of the chest; she was then seen by Sir William Jenner. Pleurisy came on; in the left chest there was complete dulness and absence of breath-sounds; opium was given and adequate doses of bark and nitro-hydrochloric acid were also given; stimulants were also administered; the pelvic swelling receded somewhat; the temperature varied between 104° and 105° F.; the pulse was extremely rapid, being in fact uncountable. Dr. Priestley said Sir William Jenner said it was "an awful pulse." The abscess finally burst spontaneously. Commenting on these four cases which he had narrated as examples, Dr. Priestley said the form of the disease varied much in different cases. Thrombosis and embolism were, he said, especially dangerous. Often only "rheumatic" symptoms were complained of, and in cases where general symptoms occurred they had often been put down as hysterical. The danger to the patient was obvious. Passing on to discuss the nature of the disease, Dr. Priestley said the question was whether there was more than one poison, or whether there was but one, and the varying effects in different cases depended upon the dose. He referred to Pasteur's view of a puerperal germ. Passing on to the question of treatment, he said, the practical point was to recognize the nature of these obscure cases. An important point was to secure due contraction of the uterus, as in many of these cases the uterus had been observed to be large; clots should be removed as they form by pressure or other means; a rigor should never be disregarded; the occurrence of any, even flitting or transient rheumatic pains in the bones or joints should be carefully noted; if no other organ be affected the heart should be carefully examined, as the occurrence of a valvular murmur may be of the greatest significance; any rise of temperature should be carefully watched. Dr. Priestley said that patients who lead inactive lives during pregnancy are more prone to puerperal affections. As germs only find an easy entrance into the system when the latter is in an unhealthy state, we can prevent bad effects from them by improving the general health and thus rendering them less active.

DR. GERVIS, of London, President of the Section, said he had seen similar cases to those related by Dr. Priestley; he had also seen less severe ones. He had often seen patients two or three weeks after delivery in whom there was no abdominal tenderness, but often simply dyspepsia and disinclination for food. On vaginal examination—and one should always be made in such cases—a considerable amount of parametric swelling was often found.

DR. EDIS, of London, said patients should be more carefully watched during the puerperal period. The practitioner should not rush hastily into the room, ask the patient how she is and how the baby is, and go away. A temperature-chart should be taken to the house, and systematic observations made and recorded. We might, he said, save many patients by attention to trivial details. A rigor should be noted, but we must remember that in a weakly patient it might be simply the expression of severe nervous shock. He had seen

similar cases to those of Dr. Priestley, who, he remarked, had travelled over a wide field in his paper.

Dr. Grigg, of London, referred to the former unsanitary condition of Queen Charlotte's Lying-in Hospital, to which he is physician. Formerly the windows were kept closed, and the patients were always afraid of catching cold, and often complained of pains. The ventilation is now much improved, as are also the general sanitary arrangements of the building. Referring to Dr. Priestley's remark, that patients who will not take sufficient exercise during their pregnancy are more liable to be attacked with puerperal disease, he made the suggestion whether this condition might not be due to want of air. He referred to a case in which the temperature rose and fell, and in which exacerbations of temperature were always accompanied by hysterical emotion.

Dr. Wilson, of Baltimore, said that when all went on well for ten days, and then the patient languishes, we have, in a large proportion of cases, one of two conditions present, viz.: 1, relaxed uterus; 2, pelvic cellulitis. Nothing was so important as to watch the condition of the uterus. Ergot and quinine were useful to secure its contraction. Injections could be employed if necessary, and if there was any offensive smell. Opium and hot injections might be employed in cellulitis.

Dr. Chalmers, of London, said this condition was not so much due to a poison from without as to the state of the mother herself. There was no need to go to bacteria. The involution of the uterus itself and the giving off into the general system of a large amount of waste material was sufficient. It was known that the lochia when inserted into an animal caused severe symptoms. Provision was made for getting rid of the lochia, and thus normally no bad effects resulted from them.

Dr. Steel, of Abergavenny, considered that sufficient stress had not been laid upon embolism as a cause of puerperal affections, and referred to the experiments of Cruveilhier which, he said, he had repeated some years ago.

Dr. Priestley, in reply, thanked the members present for the attention with which they had listened to his paper. His object, he said, had been attained if he had secured more attention being paid to minute details. Progress in science showed that no ferments were formed in the blood, but that they were wafted in from without. The more we knew the less were we inclined to believe in autogenetic infection. It did not follow that the germs entered at the time of the illness. They might have been wafted in before, and not developed until the health of the patient became enfeebled. Hence the importance of maintaining a good state of the general health.

The next paper was

ON ANTISEPTIC MIDWIFERY AS CONDUCTED IN A LYING-IN HOSPITAL,

by Dr. W. C. Grigg, of London. The hospital to which the paper referred was Queen Charlotte's Lying-in Hospital. Dr. Grigg said that the result of the introduction of antiseptics into that hospital had been that as low a mortality had been attained as in private practice. Antiseptics were therefore as efficient in obstetric as in surgical practice. Maternity hospitals had been decried and called slaughter-houses. It had, however, been shown that they could be maintained and midwives and medical students trained in them. Maternity hospitals were really the pioneers of hospital sanitation. Queen Charlotte's Hospital was built in 1752, rebuilt in 1856, and the new building opened in 1857. About five hundred patients were admitted annually, being an average of forty-two per month. The wards were sixteen feet square and twelve feet high. There was no cross ventilation. The air-space for each patient was about seven hundred cubic feet. The floors were only of deal, but they had lately received a coat of lacquer. In 1879 an outbreak of puerperal fever occurred, and the hospital was closed for five months, being reopened very curiously on the same date at which two other maternity hospitals which had been closed were also reopened. The hospital has never been closed since. Formerly it was always closed one month every year for the purpose of being cleaned. Before being reopened many sanitary improvements had been effected. The water-closets and drain-pipes were now outside and were thoroughly ventilated.

Since the rebuilding of the hospital in 1856 there had been 12,500 women delivered in it. Of these, 5,000 were married or widows, 7,500 were single. Of these, 276 had died, and 200 of these were single women. Since the introduction of antiseptics (within the last few years), this mortality had been much lessened. Wood-wool pads and the use of corrosive sublimate as a lotion and injection were introduced in 1884. Dr. Grigg gave some particulars respecting 1,100 cases which had been treated since the introduction of antiseptics. They included many severe cases; sixty might be regarded as serious. Nevertheless, no single case died within the month, and within the year they had had nine hundred cases without a death and without there having been any periodical closure of the hospital for cleansing. Dr. Grigg enumerated the various antiseptic measures employed. The linen was carefully disinfected. In each ward, after it had been used, the following measures were adopted before another patient was brought into it: Four pounds of sulphur were burnt in the ward, the floors were washed with a solution of carbolic acid, and the bedding stoved at a temperature of 250° F. While occupied by patients the wards were wiped out daily with turpentine, washing with water being avoided. The wards were heated in winter by coils of hot-water pipes, but fires in open grates were also kept going. The wards were kept at a temperature of from 52° to 54° F. Carbolized oil (1 in 60) was applied to the fingers before making any examination. The patients were douched with a solution of corrosive sublimate—1 in 2,000—after delivery. (Dr. Grigg said this was the strength of solution he employed himself; his colleague used one double this strength, viz., 1 in 1,000.) After delivery, the patients had administered to them either a wineglassful of vinegar with a drachm or so of tincture of opium added, or else some ergot. He preferred the vinegar and opium to induce uterine contraction; the action of the ergot was less persistent and was gone in twenty minutes. The patient was not removed from the ward in which she was delivered until the uterus was firmly contracted. The perineum was examined, and any lacerations were stitched up at once with a catgut suture and boracic dressing applied. Chloroform was not used except in instrumental labors. The vulva was washed with a solution of corrosive sublimate. A five per cent. solution of carbolic acid was used for washing out all vessels, catheters, etc. The same vaginal tube was never used for two patients. The patients were douched twice a day when the lochia were offensive, but as a rule they were not douched at all unless the temperature was high or abdominal tenderness present. The douche was always left off when the complication ceased. The use of the syringe was avoided; it was dangerous and painful. Dr. Grigg said vaginal or intra-uterine tubes should be of glass, and exhibited a specimen of one he thought suitable for intra uterine medication. They were always kept in a five per cent solution of carbolic acid. When done with in any case, they were boiled and then kept in strong sulphuric acid until again wanted. He thought the action of corrosive sublimate was twofold, viz., 1, that it destroyed germs; 2, that it arrested bleeding from small vessels. He believed it was the only antiseptic which could, without danger, be introduced into the genital tract of sufficient strength to destroy germs.

Dr. Gervis remarked on the value of iodoform pessaries as antiseptic agents. He was not aware who had originated them; he had heard of them from Dr. Champ-

neys. They consisted of one drachm of iodoform made into a pessary with gelatine and starch. They dissolved very slowly, and thus lasted for days. After making an examination, one of these might be left in the vagina, where it would slowly dissolve and give a very good account of any germs which might be present. One might be placed in the uterus also, if wished.

The next paper was

ON THE SEPTIC ORIGIN OF PELVIC INFLAMMATIONS,

by DR. A. E. LAWRENCE, of Bristol. Dr. Lawrence said he was convinced that a large number of pelvic inflammations were due to the absorption of septic material. Why should not the antiseptic resources available for general surgeons be used by him? Out of three thousand cases seen by him, sixty cases of pelvic inflammation had occurred in which there was a definite history of septic absorption having taken place; of these, forty terminated in abscess. He said he used the word pelvic inflammation in its widest sense; it tended to spread and involve various parts. When effusion occurred, the question was whether it was going to be absorbed or break down into pus. The latter usually occurred when the condition was due to septic absorption. Old pelvic inflammations were a frequent cause of adhesions, which prevented the normal movements of the organs. This caused the woman to be conscious that she possessed pelvic organs—a consciousness she was better without. He considered fully one-third of the aches and pains met with in women were due to old pelvic inflammation. We should, he said, try to secure two points after delivery, viz.: 1, cleanness; 2, contraction of the uterus. Dr. Lawrence said he now employed the plan made use of by Dr. Macan, Master of the Rotunda Lying-in Hospital, Dublin. This was the use of pessaries made with cacao butter, and each containing twenty grains of iodoform. This method could be carried out by the nurse, one being inserted after delivery. If any smell persisted in spite of this, he washed out the uterus himself with tincture of iodine and water. He did not approve of leaving the pessary in, and had lately met with a case of pelvic abscess due to the nurse having neglected his instructions on this point. The evening temperature of the patient was 101° for four months, the morning temperature remaining normal. Referring to the practice of dilating the cervix with tents, he said he believed that the deaths which occurred were due to septicæmia. No wonder. After dilatation had been procured, the stinking tent was removed, and the examination then usually made at once. The finger passing up into the uterus carried the septic matter with it. Before examining we should wash out well with iodized water, and thus remove all offensive matter. He preferred sea-tangle or tupelo to sponge tents. Where the latter were made use of they should never be inserted by means of the tent-introducer, but the duck-bill speculum should be used; we could then both see and feel what we were doing, and the tent need not touch any part until it reached the cervix.

The next paper was on

THE DUTY OF CONSULTANT AND PRACTITIONER IN RELATION TO PUERPERAL FEVER,

by DR. W. L. REID, of Glasgow. Dr. Reid said it was a question of what we should do in the matter of antiseptic precautions. Some felt that too much was done; some that too little was attempted. In private practice we could not deliver every woman under the spray and have everything either new or fresh from being disinfected. General practitioners who were in attendance on puerperal women *must* see fever cases. There were three matters to be attended to. These, in the order of importance, were: 1, The hands of the practitioner; 2, his clothes; 3, the hair and body generally. Instruments, etc., must of course be carefully attended to. When he had visited a septic patient what he did was to enter a small room, set the antiseptic spray going, sit down, and read. In about twenty minutes he was saturated. He then put on a fresh suit of clothes, everything being fresh, even to the necktie. The others were hung up out-of-doors for several days. Mere washing the hands was not enough, but an antiseptic should be employed. A good plan before examining was to anoint the hands with a mixture of glycerine and soft soap, containing five per cent. of carbolic acid. This defends the doctor from outside influences and also protected the patient from him. If the patient had to be seen three or four times daily then other midwifery work must be abandoned.

A discussion then took place on the three last papers.

DR. GERVIS spoke of the use of tents. He said he had entirely given up the use of sponge-tents and almost entirely that of sea-tangle ones. It was two years since he had even used one of the latter. He used Hegar's dilators now, which he considered preferable in every way. He kept the patient in bed on her back and washed out the genital tract thoroughly. Iodine vaporized by heat was, he said, a powerful disinfectant.

DR. HAMMOND, of Glasgow, referred to his own experience in Glasgow dispensary work. Among even the very poor a good deal might be done by free ventilation and the use of Calvert's carbolic soap (that containing twenty per cent. of carbolic acid). Good ventilation might be secured by covering the patient up for a few minutes every three or four hours and then opening the doors and windows. Cases will, however, occur such as those described by Dr. Priestley, in which the patient goes on improving, then a rigor occurs, the patient sinks into a weak state, and it is only by the greatest care that she can be brought round. Dr. Hammond said he could only remember one or two cases going on to suppuration. He referred to a septic case in which he was called in consultation and refused to make an examination. The patient was evidently moribund, and he told the friends that to examine could do no good and might lead to his infecting other patients. He saw the local practitioner a few days afterward and told the latter he was not to take offence because he did not examine. The practitioner replied that he wished he had been nervous as well as Dr. Hammond; he had himself examined and had infected the next three patients he attended.

DR. LAWRENCE said he kept a light suit of washable material for use in such cases. After visiting a case he considered septic he went direct to the Turkish bath. He there had a bath and put on the washable suit which he had had sent from home to the baths, and the clothes he had taken off were placed in a bag kept aseptic by means of carbolic acid, taken home, and then disinfected. If he had to attend the patient for three or four days he did not see other cases. If three or four cases were attended very close together in point of time, and one became infectious, it was most unfortunate, as the practitioner had often attended all before hearing of that one's illness. He referred to the danger of dirty hands—one he had seen exemplified. In making an examination it was better to take off the coat and roll up the shirt-sleeves than have a towel pinned round the arm in the elaborate manner in which nurses did it. He remarked that we must distinguish mere local inflammation from septic states; the former did not necessarily prohibit attendance on other patients.

DR. EDIS, of London, spoke of the over-precautions which were thought to be necessary in ordinary cases. He thought it was "antiseptics run mad." We should next hear of "antiseptic conception." In private practice thousands of midwifery cases were attended without any deaths and without the use of antiseptics. Several gentlemen had published in the *British Medical Journal* a roll of more than a thousand cases. He believed, of course, in the use of antiseptics in cases of puerperal fever. The essence of antisepsis was strict cleanliness; you could, he admitted, augment this cleanliness by using antiseptics, but he did not believe that in every case

attended it was necessary to leave an iodoform pessary in the uterus, another in the vagina, apply a wood-wool pad, and envelope the patient in antiseptic gauze.

Dr. Grigg said that any one connected with a maternity hospital must be prepared to forego a considerable amount of private practice. Practitioners would not call such physicians in consultation for fear of infection being conveyed to their patients. His experience, however, had shown that a maternity hospital could be safely conducted. As to infection, he had repeatedly seen the house-surgeon go from case to case, simply rinsing his hands in carbolized water, and with impunity. Precautions were, however, desirable. There was no doubt that the hand might be infected with a poison—whatever it was. He had a large correspondence some time since on this subject with various members of the Association. A very useful recommendation, made by one gentleman who wrote him, was to take to gardening when the hands were infected. A week or two's gardening, by bringing the hands into intimate contact with the earth, would remove all danger of infection from the hands.

Thursday, July 30th—Second Day.

Dr. Gervis, President of the Section, in the Chair.

The work of the Section was commenced on this day by the reading of two papers in French by Professor Lesshaft, of St. Petersburg. The first paper was

ON THE STRUCTURE OF THE PELVIS.

The second was

ON THE INFLUENCE OF MECHANICAL VIOLENCE ON THE FORM OF THE SKULL IN YOUNG ANIMALS.

Fresh specimens were exhibited illustrating these two papers. Numerous skeletons of young animals were also shown, showing the modifications caused by exclusive animal and exclusive vegetable diets.

Dr. W. S. Playfair, of London, then introduced a discussion on

THE PROPER SPHERE OF CONSTITUTIONAL AND TOPICAL TREATMENT IN CERTAIN FORMS OF UTERINE DISEASE.

This discussion was really inaugurated as a reply to the statements advanced by Dr. Clifford Allbutt in his Gulstonian lectures at the College of Physicians, which have been rankling in the breasts of the gynecologists ever since. Dr. Playfair referred to Dr. Routh's reply to Dr. Playfair, and said that Dr. Routh overstated his case. He then alluded to some of Dr. Allbutt's original statements. Dr. Allbutt, he said, had talked of women becoming entangled in the net of gynecology, had said their uterus was somewhat like their nose, and like that organ was sometimes a little on one side and sometimes ran a little. If the former, it was impaled on a prop; if the latter, it was painted daily with iodine or other caustic, until the fatal arrow of hypochondriasis was at length implanted in the woman. Referring to these phrases, Dr. Playfair said he would repeat what he had stated in Dr. Allbutt's presence, viz., that Dr. Allbutt's admirable mastery of English had led him away into epigrammatic statements. He had partially made the "amende honorable" by saying that he did not apply these remarks to scientific physicians, and had done him (Dr. Playfair) the honor of saying that he excepted him from those whom he accused. It was true, said Dr. Playfair, that he had himself paid great attention to the neurotic element in gynecology, but no one who knew him could accuse him of want of attention to true gynecological work. We had of late years made great advances in diagnosis, pathology, and treatment, *e.g.*, in hæmatocele, cellulitis, etc. Still some diseases were less easily determined than others, and mistakes were common, but he denied that they were due to other causes than want of knowledge and error in judgment. Moreover, there was a danger in underestimating the condition. The pendulum tended to swing to the opposite direction. Some doctors went so far as to tell a woman that she had nothing the matter with her, and send her away for a change and tell her to have nothing to do with the doctors, and this, too, in a plain case susceptible of relief. Errors as to treatment were most frequent in three classes of cases, viz., deviations in the axis of the uterus, endometritis, and (so-called) ulcerations of the cervix. We could not lay down definite rules as to treatment. It was impossible to exaggerate the value of constitutional treatment in uterine diseases. It was not surprising that the general health suffered, and often overshadowed the original disease. It was difficult to combine local treatment with general rest and hygiene. He differed from Dr. Graily Hewitt on the question of deviations of the uterine axis, but he quite agreed with him as to their effect on the general health. We were now passing through an era of flexions. A patient now often asked, "Am I displaced?" They had often been told they were slightly displaced, when in point of fact no diagnosis had been made. It was difficult to imagine how any student of uterine diseases could think flexions were of no importance, as a well-fitting pessary often gave relief. Many cases, though, needed no treatment. When a pessary gave relief, there was no need to make repeated local applications. When such were made it was a great abuse. When a pessary had been applied, two or three subsequent visits were ample, and then there was no need of further treatment for months. What was called ulceration of the cervix was merely abrasion, and when the speculum was first brought in the importance of this affection was exaggerated, and repeated caustic applications were made to the cervix, which could, at the best, have but a temporary effect. In itself this affection was of no importance, and frequent cauterizations were not legitimate under any conditions. Even in endometritis a few applications made within the first few days immediately succeeding one or two menstrual periods were generally sufficient. The gynecologist could not be accused of over-treatment in any other local diseases. *In via media tutissimus ibis* was the safest motto. We must not overestimate the local lesion on the one hand, or the disturbance to the general health on the other. There might be a danger of provoking a neurotic taint. Patients differed very much.

A letter from Dr. Clifford Allbutt was then read. (Dr. Playfair had previously to the meeting submitted his paper to Dr. Allbutt, so that the latter might be prepared to criticise. Dr. Allbutt did not come, but wrote a letter.) Dr. Allbutt said Dr. Playfair had quoted one or two passages from his lectures without taking the context. He had only stated what country practitioners had been muttering for years. He had known cases in which the treatment was co-extensive with the duration of the London season, or with the session at the medical schools. In what works, he asked, were the limitations laid down of which Dr. Playfair approved?

Dr. Gervis said he utterly repudiated the charges made by Dr. Allbutt. As for what the country practitioners were said to have stated, why, he said, in most cases where local treatment was employed it was carried out in conjunction with the local practitioner.

Dr. Edis said Dr. Allbutt had done harm in one way and good in another by saying something to create amusement. The position of the uterus was not the only thing to observe in making a vaginal examination. He thought Dr. Clifford Allbutt had done a mean trick; as a specialist himself he had fouled his own nest. But it was not a personal question. It was a question of our art. A combination of local and constitutional treatment was best.

Dr. Lawrence said that what Dr. Allbutt had stated was true as regards dishonest practitioners. The more we knew of our patients the less local treatment did we employ. He himself made many more local applications to his out-patients than he did to his in-patients, whose

condition he knew better. He said he went further than Dr. Edis as regards vaginal examinations. Dr. Barnes said in his work that we ought to ask ourselves, What are the groups of symptoms calling f r a genital examination? He agreed with Dr. Barnes in this. We ought to know what to expect before we examine. There were some cases in which we should never think of sending away the patient without making an examination. In a case, for instance, of hemorrhage in a woman in whom the menses have entirely ceased, we should examine and should expect to find cancer or some other grave lesion.

DR. MEREDITH, of Wellington, Somerset, referred to defective sanitary arrangements as a cause of uterine affections. Even a slight leakage of gas in a bedroom had been known by him to cause uterine trouble.

DR. IMLACH, of Liverpool, said if we could not cure by local treatment in fourteen days we had better give up the case. In many cases of flexions there was often disease of the tubes and ovaries as well. It was of no use to treat the flexion in such cases; it was not the real disease.

DR. BERRY HART, of Edinburgh, said that what we wanted was more exact knowledge of many of these affections.

DR. STEEL, of Abergavenny, said it was no wonder that local treatment was overdone.

DR. WILSON, of Baltimore, said he endorsed every word that Dr. Playfair had said. He was glad to find British views were in accord with those held on his side of the Atlantic. He urged the importance of exercise. One or two months of local treatment was enough at a time. If patients did not improve in that time he sent them away for a change, or, if they did not go away, he told them to stop away from him for a time.

DR. GERVIS advised the judicious combination of local and constitutional treatment.

DR. PLAYFAIR briefly replied, and the discussion then terminated.

(To be continued.)

SURGICAL SECTION.

WEDNESDAY, JULY 29TH—FIRST DAY.

MR. HARRISON, of Liverpool, read a paper (see page 113)

ON BLADDER TUMORS.

DR. STEIN, of New York, recommended bilateral incision of the prostate as a means of exploration of the bladder. He also exhibited an instrument for uniformly dilating the female urethra, in order to remove tumors in the bladder.

MR. CARR had recently had a very interesting case, which showed the value of operating in tumors of the bladder. A woman had been suffering from hæmorrhage, and was found to have a mass of cauliflower-excrescence in the bladder. This was removed, and the woman made a rapid recovery, which lasted for some years. This Spring, 1885, she had a return of the bleeding. He again dilated the urethra, and found a broad, hard tumor in the bladder. Some of this he enucleated, and some he scraped away with Durham's retractors, and then sponged the parts with iodine and phenol. The woman was now quite well. All this shows that when the growth is malignant even much may be done. Between the two operations on this patient she had given birth to a child. He had no experience in such cases in the male, but quite approved of Dr. Stein's plan of bilateral section of the prostate in such a case.

DR. PENNY, of Bristol Hospital, recommended suprapubic section for the removal of such tumors.

MR. HUMPHREY, of Shrewsbury, also approved of Dr. Stein's plans in dilatation of the female urethra.

MR. HARRISON, in his reply, read two letters, just received. In one from Mr. Annandale that gentleman said that every case must be judged on its own merits and carefully explored before undertaking such an operation. Mr. Cage wrote that such bladder tumors were certainly very hopeless cases. Perhaps one in ten might be benefited by operation.

MR. WILLIAM ADAMS, of London, read a paper on

CONGENITAL DISLOCATION OF THE HIP-JOINT.

In 1845 he had seen the first case of the complaint in a boy eighteen years of age. In 1860 more than sixty cases had been observed, thirteen of which had been in males and forty-seven in females. In nineteen cases both hips were affected. In two of the histories the infants were born before the medical man arrived. The affection was in one case said to have been hereditary. No malposition is noticed in the infant at birth, and it was not until it began to walk that the child was noticed to have anything the matter with its joints. In some cases the patient is treated for hip-joint disease. At the age of three years the diagnosis becomes easier by means of Nélaton's lines and the ilio-femoral test. It is said that the head of the femur can be felt in such cases, but he had not found this to be true. Nor is obliquity of the thighs a symptom. Carnochan's original work was published in 1850, and several of the plates there given were drawn from life, or copied from pathological specimens in the Dupuytren Museum of Paris. Mr. Adams put the question: Is this a true dislocation or a malformation of the acetabulum? He was inclined to look on the disease in the latter sense. The acetabulum was not sufficiently developed in the uterus, and the capsular ligament was long and loose in most of the cases.

A paper was read by DR. THOMAS, of Adelaide, on the

TREATMENT OF HYDATID CYSTS OF THE LUNGS BY MEANS OF PUNCTURE.

Such patients, the author said, often exhibit the most advanced symptoms of consumption. In one case the cyst weighed ten ounces, and contained two hundred and fifty-six square inches in superficial extent. There had been thirty-two cases of this disease collected by himself. In the Adelaide Hospital there had been five cases operated on. The general result of the treatment by perforation had been that of twenty-five operated upon five had died. The patients were of all ages, from ten up to fifty years. A cyst under the scapula might be opened by means of a puncture made under the clavicle, and the trocar and cannula might be used. He personally had operated on five cases. Of these four did well and the fifth died. Altogether he made out that twenty-seven cures had arisen from thirty-two operations. Some persons had wished to put forward the idea that all cavities in the lungs should be treated by perforation, but he thought this out of the question in cases of phthisis. Finally, Mr. Thomas showed specimens of the various means taken to arrest hemorrhage after the operation, one of these being a cleverly devised bag resembling the fiddle-bags of Dr. Barnes, and the others india-rubber chest catheters made by Messrs. Mayer & Melzer.

DR. WARD COUSINS referred to the difficulty in the diagnosis of such tumors, and there was danger of inflammation of the sac after opening.

MR. THOMAS said that this was doubtless the case sometimes, but not so when the patient was found to be expectorating large fragments of hydatids. In Australia these cases were frequent enough, and in most cases there was no difficulty in that part of the matter. The operations had been most successful.

THURSDAY, JULY 30TH—SECOND DAY.

DR. BENNETT in the chair.

MR. TREVES read a paper (see p. 169) on the

TREATMENT OF INTESTINAL OBSTRUCTIONS.

MR. LAWSON TAIT, on being called on to speak, explained that he had not heard the paper, and was not able to give any opinion on it, having been in the Obstetrical Section during the reading of the paper.

Dr. George Smith said the best ground for diagnosis of the position of the lesion was only to be learned by visual inspection, not by tactile knowledge. The coils should be seen and, generally speaking, the part that was most inflated would come to the surface and not be very far off from the seat of the stricture. Not that he was at all in favor of any wholesale extrusion of the bowels. The incision should be in the median line, and the finger should be substituted for the hand in ascertaining the seat of the disease. He might say in passing that the bowel might be handled with perfect impunity. Large quantities of fluid in the intestines might cause intestinal obstruction of a physiological kind. Over-distention of the bowel should be avoided. Nélaton's operation for enterotomy was the best, and the best plan was to form for a short term an artificial anus. He confessed that the operation for intestinal obstruction was one of the most difficult in the whole range of operative surgery, and the one which required the greatest care and knowledge of the structures coming before the operator's view.

Mr. A. Eddowes said that occasionally a case of spontaneous cure of intestinal obstruction took place, and gave the clinical history of a case of this kind. The diagnosis should be made as early as possible, and he mentioned a case where a boy had come into the Salop Hospital, in whom a portion of intestine had followed the route of the testis, which lay in an undeveloped condition in the inguinal canal close to the testis. This was found out after death, as the boy died shortly after admission into hospital. That case might have been saved had the diagnosis been clearly made out.

Mr. Robson Mayo said that the record of post-mortem examinations of intestinal obstructions in hospitals showed that many cases could not have been benefited by operation, while others might have been greatly benefited by a timely operation. In the former run of cases there were such as those where purulent peritonitis existed. In one case in which he had operated he had removed nearly two feet of gangrenous intestine, and stitched the divided ends of the bowels together. This patient died the following day. All cases of laparotomy, whether successful or the contrary, should be reported. Out of six cases he had operated on four recovered. Mr. Teale, of Leeds, had collected histories of twenty-one cases, most of which had died. His conclusions were that in chronic intestinal obstructions belladonna would often relieve or cure. Laparotomy as a means of diagnosis and possible treatment was often useful and sometimes might remove the obstruction or at least give some relief. This is one of the most important of all surgical cases, and he believed that, in the same way that ovariotomy had recently come into the sphere of the surgeon, so would the treatment of intestinal obstructions in a short time.

The debate was continued by Mr. Pughe and by Dr. Ward Cousins.

Mr. Pughe then read "A Case of Successful Abdominal Section for Internal Strangulation."

Mr. Bishop Stanmore read a paper on "Enterorraphy, with a Description of a New Form of Suture."

Mr. Edmund Owen read a paper on "Caries of the Cervical Vertebræ."

Dr. Snow read one on the "Non-heredity of Cancer," and Mr. Keetley spoke on the "Radical Cure of Hernia by Injection."

The Section adjourned until 11 A.M. on Friday.

Friday, July 31st—Third Day.

Dr. Bennett in the Chair.

Dr. Bernard Roth read a paper on "Two Hundred Cases of Lateral Curvature of the Spine Without Mechanical Support." The great value of regulated gymnastic exercises was strongly insisted upon by Dr. Roth, who gave a number of cases in which patients had been restored to health by his plans. There was no discussion.

Mr. Brindley James read a paper on the "Treatment of Lumbago and Rheumatic Pains by the Percussopunctator," in which he recommended the use of galvanism in these painful affections, giving a series of interesting cases.

Dr. C. B. Ball, related a case of "Melanotic Sarcoma of the Rectum," in which he had performed excision of the rectum, with the result that the patient was alive a year after the operation.

Mr. Farrant Fry read an account of cases of the treatment of varices by excision, which he much recommended in many cases.

Mr. Mansell-Moullin read a short paper on "Chronic Sprains."

Mr. T. E. Cahill read a paper on "The Latest Surgical Dressing." After saying that Listerism no longer held sway in Berlin, he spoke of several plans of aseptic dressing still in use in Germany, and wound up by describing a dressing of dried peat which had been heated and dried several times, and was then applied to wounds. This acted evidently, he said, by its astringency not by its asepticity.

Dr. Drysdale, of London, had seen in the surgical practice of Mr. John Wood such admirable results from the antiseptic treatment, that he was very sorry to hear that surgical opinion seemed again to be waning in its belief concerning carbolic acid.

PUBLIC HEALTH SECTION.

Wednesday, July 29th—First Day.

Dr. Davies, in the Chair.

A paper by Dr. Paine, of Cardiff, was read on

CHOLERA AND THE CITY OF CARDIFF.

In the absence of the author, it was read by Dr. Vacher, of Birkenhead. He gave in his adhesion to the germ theory of the disease. It is a specific organism which causes cholera, which may continue latent for a long period, as exemplified in the origin of the cholera in Toulon last year, from stores in an old hulk that had lain by since the Crimean war in 1854. In 1849 cholera first visited Cardiff, in May, when it first occurred in Caroline Street, and in a few days spread through the contiguous streets, where the water-supply was polluted. There were 351 deaths in a population of 16,693. A temporary hospital was erected for cholera patients. After this epidemic a complete system of drainage was established. In 1853 a man came to Cardiff with cholera from Bristol, and was removed to a building near the workhouse. The man in charge took the disease and died in a few days, and also the nurse; but there were no more deaths. In July a foreign seaman with cholera was found in a seaman's lodging-house, in Millicent Street. He died of it, and his infection was traced to a foreign vessel. Two days after this cholera broke out in the street, and deaths took place in the houses adjacent to No. 49, where he died. Thirteen cases arose in two days. Convalescents were removed to the temporary hospital, where each patient remained a few days and was then discharged. No second case occurred in the family thus treated. The use of well-water was prohibited and pure water was used. In 1866 cholera entered Cardiff from the sea, but only 44 died of it. A block of nine houses in Morgan Street was found where one case of cholera occurred. All of these houses were supplied from a pump. Eight of the houses had this supply. Ten cases occurred in the houses. The ninth house had water from a public supply and escaped. In 1884 fear was entertained lest the disease should come to Cardiff from Toulon. A steamer was therefore employed to board all vessels arriving from suspected ports and to put the cholera questions. If any case of cholera was reported on board, the patient was removed to a temporary hospital on the island of Flat Holm, and the

crew carefully inspected. All infected vessels were thoroughly disinfected before being admitted into port, the bilge-water being carefully discharged. Four vessels with infection on board arrived, from which three cases of cholera were removed and treated in hospital. By such care cholera is robbed of its chief terrors.

DR. BALLARD, of London, said the most agreeable feature in the paper read was that no mention was made of the bacillus. Dr. Pringle had followed the line of argument pursued before there was any talk of germs, and he thought the younger members of the profession would do well to look mainly after local conditions for the prevention of cholera.

MR. DYKE, Medical Officer of Health, at Merthyr, said he had had experience of four outbreaks of cholera in Merthyr, and was ready to express his opinion that the spread of cholera was greatly caused by filth. If filth were removed, cases of cholera would not occur.

DR. J. MARTIN, of Weston-super-Mare, gave a description of cholera in two contiguous villages, one healthy and situated on a gravel soil, and the other dependent on a polluted water-supply. The latter was severely attacked.

DR. DAVIES praised the immense care of Dr. Paine. There was at present no power to deal with persons on board ships unless they were actually ill. He thought power ought to be given to detain the rest in an infected ship for forty-eight hours, until danger of contagion was over.

DR. C. R. DRYSDALE, of London, considered that cholera was as specific a poison as small-pox or syphilis, and that this poison entered the system either through the lungs or by means of a contaminated water-supply. Some persons said it was not taken from the sick, but in the Punjaub, in one epidemic, seven hundred attendants on the sick had taken it. The Broad Street pump was contaminated in 1856 in London, and in ten days five hundred persons were attacked with cholera. Of nineteen persons who drank water contaminated by fresh excretions in one epidemic, five died within forty-eight hours. The disease never appeared in any city unless some person with cholera entered that city. It was impossible in European cities for cholera to arise *de novo*. If all these undeniable facts were granted, the conclusion was inevitable. Cholera was a contagious zymotic disease, and could only be prevented in the way that typhoid fever, syphilis, or other poison diseases were prevented, *i.e.*, by the segregation of the sick, the disinfection of the discharges from the patient, which should not, if possible, be allowed to enter the sewers, and by the greatest attention being paid to the water-supply. Pure water-supply in Hindoostan had greatly lessened the mortality from cholera among our troops. Then, again, the flooding of the Bristol sewers, by Dr. Davies' advice, in 1866, had cut short the epidemics when they arose in any part of that city. Of course, cleanliness and comfort were admirable prophylactics of all similar diseases, but even the most cleanly people would contract cholera, syphilis, or small-pox, if the contagium were in their midst. Hence, the main point in the prophylaxis of cholera was to take care that it was recognized to be a contagious zymotic disease, and, if this were understood, hygienic measures would be clear enough. As to treatment, it was clear that the purging and vomiting were the efforts made by the system to free itself from an asphyxiating poison. Hence, opium and astringents were contra-indicated, but no clear treatment was as yet made out for the guidance of the profession.

DR. CORNER, of Poplar, was much in favor of disinfection of sewers by perchloride of iron, but did not quite agree that opium was contra-indicated. The report of Dr. Lewis, in 1866, with respect to the post-office officials, showed that those men who had used a prescription for incipient diarrhœa containing a confection with opium, showed that opium seemed to have some power in preventing the onset of the disease. The use of doubtful water should be sedulously avoided.

DR. BALLARD said he did not mean to assert that there was nothing living in the causation of cholera, but maintained that it was not proved to be a germ-caused disease. He thought it very unfortunate that the public should be led to think the disease was contagious until this was fully proved to be the case.

SURGEON-GENERAL CORNISH said the subject of cholera had attracted his attention for the past thirty years. He could not help thinking that it was communicable from persons with the disease to others. The spread of the disease could be greatly lessened by attending to the cleanliness of cities, and to the water-supply. It was probably a germ-caused disease. Dr. MacArthur had treated an epidemic in the east of Fifeshire. There were there two very filthy villages, St. Monans and Pittenweem, quite in the neighborhood of each other. In the first of these no cholera had occurred, but in the second there were many cases. The only difference between these villages lay not in the filth, but in the purity of the water-supply, which in the former came from a mountain lake, while the other was contaminated with sewage. The poison of cholera was clearly very soluble in water. With regard to the opium treatment, he had some doubts what was best to do; he remembered that Murchison had proposed morphia and chloric ether.

DR. DAVIES said he would not mind burying the word germ if that was likely to lead to dispute. He had seen a great deal of cholera. First of all, he saw it in Bristol in 1869, when, being a bachelor, he was asked to look after the paupers who were then dying very fast of the disease. He then learned the tactics of the enemy. In the wards he was attached to, none of the boys had been attacked until one boy climbed over a railing and bit off the buttons from the trousers of an old man that had died of the disease. That boy died within twenty-four hours. Dr. Evans, one of the masters of the Bristol school, would insist on drinking water from Jacob's Well, a contaminated source. He died of cholera. Typhoid fever subsequently attacked nine houses supplied with water from that well. In 1866 he acted on the supposition that there was something portable in the poison of cholera, which might be attacked by chemicals. After talking the matter over with Dr. W. Budd, he had the drains flushed with a solution of perchloride of iron, which had acted marvellously well, and was a very cheap method of avoiding death from this terrible disease. As to treatment, he had tried the fractional doses of calomel as advised by Dr. Ayres, of giving two grains of calomel every ten minutes, and also the plan of giving drachm doses, but these had been of no service. All the patients to whom castor-oil had been given died, so that his present views of treatment were almost equivalent to *nil*. Sanitary measures are essential. He agreed with Dr. Drysdale in all he said, but, after all, the non-contagion advocates followed the same practical remedies.

DR. PRINGLE, in reply, said cholera did not exist among the lower animals, except, perhaps, among cows. If cholera were infectious or contagious, he thought he would have taken it when treating so many in Hindoostan. The condition of the poorer classes should be seen to, and poor places emptied. Neither opium nor sulphuric ether were of any service.

DR. MAUNSELL read a paper on "Summary Views of Medical Aid."

(To be continued.)

"UNTIL the American Medical Association, however, can maintain sufficient order at its meetings to enable it to take a creditable vote upon questions coming before it, it should abstain from interfering further with the arrangements for the International Congress. In fact, for the future it had better leave the matter where it belongs—in the hands of the American medical profession at large, which can be depended upon to provide the necessary intelligence, energy, and organizing ability to make the Congress as successful as any which has preceded it."—*Philadelphia Medical Times.*

OF THE BOSTON CITY HOSPITAL

THE HOSPITALS MEDICAL SOCIETY OF PARIS.

Stated Meeting, June 26, 1885.

M. VIDAL, PRESIDENT, IN THE CHAIR.

(Special Report for THE MEDICAL RECORD.)

M. FÉRÉOL related the history of a patient whom he had presented at a previous meeting of the Society. It was that of a young woman in whom

PERFORATION OF THE VELUM PALATI

had taken place with great rapidity. The patient denied having had syphilis, and no traces of a previous infection were anywhere discoverable. The general opinion of those present, however, was that the lesion was syphilitic in character. M. Féréol placed the patient upon iodide of potassium for a week, and observing no improvement had then had recourse to a mixed treatment of mercurial inunctions and the internal administration of ninety grains of iodide of potassium. The patient suffered no inconvenience from the treatment, but the infant whom she was nursing had wasted away. The lesion seemed to be constantly increasing.

M. VIDAL thought it would have been better for the infant's sake to depend upon the mercurial alone. He feared that the perforation was due to a subjacent osseous necrosis.

M. FÉRÉOL said that the infant did not suffer as long as the iodide was given alone, but only after the commencement of the mixed treatment. He affirmed that there was no osseous lesion present.

M. FERNET then read a

EULOGY OF M. NOËL GUENEAU DE MUSSY,

whose death occurred recently.

THE PRESIDENT thanked M. Fernet in the name of the Society, and announced that a subscription list would be opened to provide for the purchase of a bronze bust of their late member.

M. MERKLEN then related a case of

TUBERCULAR INOCULATION.

The patient, a woman twenty-six years of age, free from any tuberculous antecedents, either hereditary or personal, had taken care of her husband, who was suffering from phthisis, for a period of six months. She had slept in the same bed with him, and had often to endure fatigue and deprivation of sleep, but had nevertheless remained in good health. Two months after her husband's death she noticed a number of little nodules on the index and middle fingers of the right hand, soon followed by nodosities, first on the anterior aspect of the forearm, and later on the back of the hand and external border of the forearm. There was no pain, but the patient soon began to emaciate, and in a short time the little tumors presented the characteristics of cutaneous tubercular gummata. Examination of the lungs showed signs of tubercular infiltration. Tubercle bacilli were found in the cutaneous lesions. The speaker thought that the case was one of true tubercular inoculation, brought about by the contact of the fingers with the clothes and the sputa of her husband. The pulmonary affection he was led to regard as secondary.

M. VIDAL had seen a somewhat similar case, which, however, differed from this in that the pulmonary disease was primary and the cutaneous tubercles secondary.

On motion the Society then adjourned.

THE INTERNATIONAL DISEASE.—The Neapolitans call syphilis the French disease; the French, the disease of Naples; the Poles call it the German disease; Hollanders and Englishmen refer it to Spain; the Orientals lay it to the Franks, the Persians to the Turks; the Portuguese christen it Castilian, and the Chinese call it the disease of Canton. Other peoples follow the same rule as those mentioned. Syphilis has no father who is willing to stand responsible for its birth.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, June 10, 1885.

JOHN A. WYETH, M.D., PRESIDENT, IN THE CHAIR.

DR. WALDSTEIN, from the Committee on Microscopy, reported that the specimen presented by Dr. C. H. Knight at the Stated Meeting, May 27, 1885, was epithelioma extending deep into the tissue of the tongue.

EXSECTION OF THE KNEE-JOINT.

DR. JOHN H. RIPLEY presented a patient with the following history: Francisco A——, thirty-eight years of age, native of Italy, laborer, married, was admitted to Charity Hospital, September 14, 1882. His father and mother are both dead; cause of death unknown. The patient has two brothers, both alive and well.

Previous History.—No history, and no evidence of venereal disease. Four years ago, in Italy, the patient had an attack of "rheumatism," at which time he suffered from severe pain in the left knee-joint, which was hot but not swollen. This attack lasted about one year and disappeared spontaneously.

On September 2, 1882, the patient slipped upon a banana-peeling in New York, fell sidewise and injured his left knee, which immediately swelled to "twice its natural size," and became very hot and painful. Twelve days later he entered Charity Hospital, where he was treated for rheumatism for three months, and then transferred to another ward, where extension was employed for two months in conjunction with the use of liniments and exhibition of some internal remedies. Extension was then discontinued for two months, other treatment continued.

Seven plaster-of-Paris splints were then applied, each at intervals of six weeks. Other remedies were then used for a varying length of time, as electricity, tincture of iodine, actual cautery, etc.

On October 21, 1884, exsection of the knee-joint was performed by Dr. J. H. Ripley, and the limb was put up in plaster-of-Paris. During convalescence temperature did not go above 103° F. This occurred only during the second week after the operation, and lasted only a short time. Discharges from the wound were slight in amount and normal in character. At the end of two months the wire sutures joining the sawn ends of the bones were removed, leaving two fistulous tracts of considerable extent on either side of the knee. Under the use of mercuric bichloride solution (1 to 2,000), nitrate of silver, strapping, and other antiseptic and astringent remedies, the sinuses finally healed. No dead bone has been found at any time.

The case was interesting in several respects. In the first place the fact was interesting that the patient had an inflamed knee for nearly three years without giving any evidence of suppuration until the joint was opened. At the time of the exsection Drs. Shrady, Howe, Bryant, and Gibney were present, and neither was willing to commit himself as to the condition of the joint, and several of them doubted the propriety of performing the operation. Dr. Ripley, however, felt convinced that it was useless to continue palliative measures. Even after the patient had been anæsthetized, crepitus could not be detected, and there was no evidence of destruction of the joint; there was simply impairment of motion, and the limb was swollen and tender.

Another point of interest was the illustration the case afforded of the reparative power of diseased bone. Had he removed all the bone diseased there would not have been anything left except the shafts of the long bones above and below the knee. The affected portions were in the condition of osteo-porosity, and filled with abscesses, which Dr. Ripley scraped out, and also removed the bone immediately adjacent.

The patella was extensively carious, and the articular

cartilages were partially destroyed, but at no two opposing points, which explained the absence of crepitus.

The third point of interest was with reference to the use of wires, which, he thought, did but little, if any, good. When he came to remove the metallic sutures (iron), he had almost as much difficulty as he experienced when exsecting the joint.

It was Dr. Ripley's second case of exsection, the first occurring several years ago in the person of a girl in Charity Hospital, whose knee-joint was in substantially the same condition found in this case, and in which he removed about the same amount of bone. The limb, however, was not rendered immobile, and the patient was much longer in recovering than in the present case. The patient presented had two inches shortening. The parts healed by first intention, except where the drainage-tubes were and the wire sutures.

THE PRESIDENT regarded the result as a most excellent one, and the case as one affording strong evidence in favor of exsection rather than the more common operation of amputation. He was convinced that the rate of mortality after exsection of the knee-joint was probably one hundred per cent. less than it was ten years ago. He had performed the operation three times during the last winter, and all the patients recovered, and the bone in each instance was so extensively diseased that, had he removed all that was affected, there would not have been sufficient left to justify the exsection. All these limbs were dressed with immovable splints, and wire was not used. He saw no reason why Dr. Ripley should have worked to remove the wire, as it would have done no harm if allowed to remain.

DR. VAN GIESON said that, from what he had observed, although he had never performed the operation, it was better not to use any metallic sutures whatever for holding the bones in apposition. He was unable to see what was gained by their use, as the limb could be placed in the proper position after the operation and kept there by immobile apparatus.

DR. RIPLEY thought that if something could be introduced temporarily, to aid in determining when the sawn surfaces of bone were in perfect apposition, it would be all that was necessary.

DR. A. JACOBI presented a patient with

A CONGENITAL DEFORMITY,

described as follows in a written history furnished by Dr. A. Brothers, House Physician, and Dr. Pope, Senior Assistant, Bellevue Hospital: William McE——, seven years of age, a native of the United States, was admitted

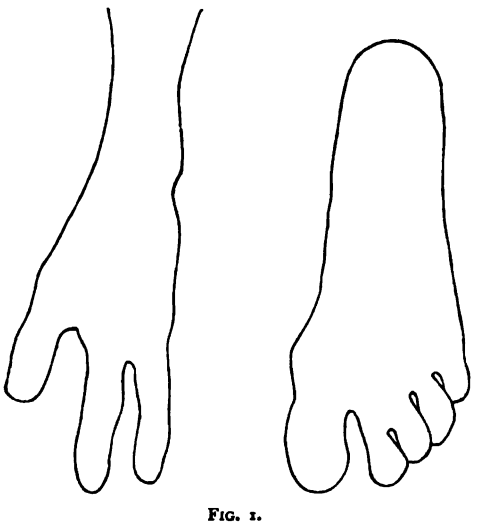

FIG. 1.

June 6, 1885, to the Marquand Pavilion. Otherwise than the deformity the child was healthy. The right upper extremity was normal. The left arm was normal. The left forearm and hand presented the following interesting features: There were only three fingers, the index- and little-finger being absent, together with their corresponding metacarpal bones. The ulna and radius were present, but shorter than the corresponding bones of the other forearm. Left ulna 14 ctm., right ulna 16¾ ctm. The left elbow-joint was imperfectly formed, so that the hand could not be completely supinated. This seemed to be due to the position of the head of the radius. Which of the carpal bones were absent could not be determined with any certainty. The lower extremities presented symmetrical malformations, except

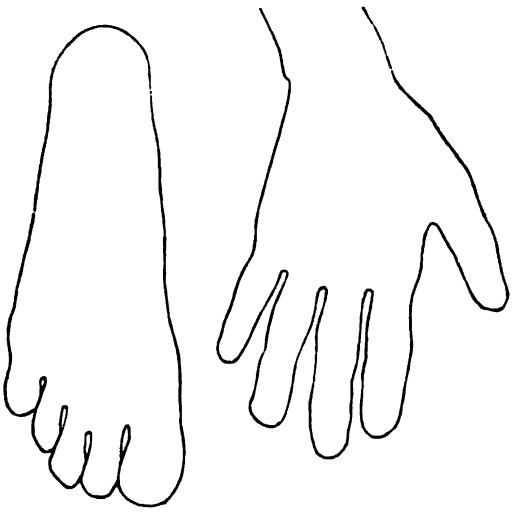

FIG. 2.

in the following respects: The left foot was about one-half inch shorter and smaller than the right. The right thigh was longer than the left. From the right trochanter to the condyle it was 14 ctm. From the left trochanter to the condyle 10 ctm. The movements of the right hip were much easier and freer than those of the left. The patella was absent on the left side, and imperfectly formed on the right. The legs were of unequal length. The left leg, from the condyle to the internal malleolus measured 27 ctm., right leg 28 ctm. On the left foot the second and third toes were slightly webbed. The face and head were symmetrical. The chest showed some rachital development, most marked on the left side The thighs presented forward and slightly outward, as well as downward when the patient stood erect. The patient was an orphan, and had one brother eleven years old, who was also deformed.

Dr. Jacobi also presented another patient, William B——, three years of age, who was admitted to the same pavilion, at Bellevue Hospital, May 19, 1885, with a congential deformity, consisting of

SHORTENING OF THE LIMB, ABSENCE OF THE FIBULA, PRESENT ONLY TWO TOES WITH THREE METATARSAL BONES.

The following history was also written by Drs. Brothers and Pope:

The patient presents a congenital deformity of the right leg and foot. The tibia has an anterior curve at about the junction of the middle with the lower third. At that point there was a longitudinal scar one-half inch in length. There was strong eversion of the foot, and absence of the outer malleolus. There seemed to be no fibula, at least none could be made out. This opinion was confirmed by the position of the foot and the absence of the outer ankle. There were only two toes; the great toe and one other, which latter seemed to be a junction of two toes, as the bones which entered into its formation, except the distal phalanx, were double or separate. There were three metatarsal bones. The great toe articulated with the first of these and the second toe with the other two. The formation of the right lower extremity to the knee seemed to be perfect. It

was impossible to bring the leg into a straight position (line) with the thigh, either from the action of the posterior muscles of the thigh or some abnormality in the formation of the knee-joint. The leg also, when brought as nearly straight as possible, turned out from the median line of the lower extremity, so that the concavity of the entire limb presented externally. The thighs were of equal length. The right leg was shorter than the left by one and one-half inch; right leg, eleven inches; left leg, twelve and one-half inches. The tendo Achillis was present and normally attached. There seemed to be no anterior tibial artery; at least they were unable to find any pulsation where it should be. The posterior tibial was normally present. The right foot was shorter and smaller than the left.

On admission, the child had sore eyes, which condition had passed away under treatment with sulphate of copper and a saturated solution of boracic acid. As to the bones entering into the formation of the tarsus it was impossible to speak with certainty. The os calcis was present, probably also the cuboid and astragalus and the scaphoid. The cuneiform bones seemed to be absent. The tendon (only one could be made out in this case) of the outer group of muscles of the leg could be felt at the outside of the lower end of the tibia seeking its normal attachment. This muscle, together with the absence of the fibula, seemed to cause the eversion of the foot. The right patella seemed to be somewhat smaller than the left, and placed a little external to its normal position. The three metatarsal bones articulated with the scaphoid and cuboid.

Dr. Jacobi remarked that he had seen three or four cases in which one of the bones of the leg was absent. In two of the cases seen previously there was also a superficial scar, as if there had been a perforation of the skin, and it must have been formed within the second month of intra-uterine life, when the forming bone was close to the surface and superficial ulceration took place. When the skin is just forming such an external lesion was very natural.

Dr. Van Santvoord presented a specimen of

ULCERATIVE ENDOCARDITIS IN THE ATHEROMA OF THE AORTA AND LARGER ARTERIES.

J. M——, aged forty-six; single; baker; admitted March 28, 1885.

Family history.—His father died suddenly after an illness of seven weeks at the age of fifty-four. Nature of illness unknown. He had previously been strong and healthy. His mother died suddenly of heart-disease at the age of sixty-three, after having been an invalid for several years. Of four brothers and sisters one he knew to be strong and well, the others he had lost sight of.

Past history.—Patient had been a hard worker; his surroundings had been always good; he was a hard drinker, having been accustomed to go on prolonged sprees ever since his sixteenth year. When a child he had measles, scarlet fever, and small-pox; when twenty-four years old he had a chancre, but no history of secondary disease could be obtained; he had an attack of the rheumatism, commencing in the ankle-joints, during the war; he had suffered from the same disease at intervals since then; for seven or eight months prior to admission to the hospital his feet would be swollen at night after standing all day. Patient's history is imperfect, owing to his apathy and loss of memory.

Physical examination.—Heart: Aortic, direct, and regurgitant and mitral regurgitant murmurs heard. The apex was in the sixth intercostal space, midway between the edge of the sternum and the nipple. Lungs negative. Liver showed diminished dulness. On admission a rose-colored eruption, consisting of small papules, was seen scattered over the body. This eruption gradually disappeared, the spots in some instances becoming almost blue before passing away. Mental condition on admission was good, but he later became apathetic and his memory failed. No abnormality noticed in his urine. On admission the patient was suffering from an acute attack of rheumatism. During the two months of his hospital residence he suffered from irregular recurrences of the malady, which would always yield to a certain extent to ol. gaultheriæ or sodii salicylat. The patient had profuse sweats, which were controlled by atropia. He had irregular exacerbations of temperature, sometimes with and sometimes without exacerbations of his rheumatism. The patient gradually emaciated, became unable to take food, and died of exhaustion, May 31, 1885.

Autopsy.—The body was somewhat emaciated, and considerable post-mortem lividity was noticed. Head: There was a small bony growth which infringed upon the brain between the second and third frontal convolutions, but it had apparently given rise to no symptoms. There was a certain amount of pachymeningitis hæmorrhagica, chiefly over the left hemisphere. The lateral ventricles were dilated, and the ependyma was somewhat thickened. The large vessels at the base of the brain were considerably atheromatous, but those composing the circle of Willis were apparently healthy. Thorax: The lungs were somewhat œdematous, but no infarctions were found. There was a small quantity of clear fluid in each pleural cavity. Abdomen: The liver was somewhat enlarged, fatty, and cirrhotic; the spleen was nearly double the normal size, soft, and was universally adherent; the intestines showed no particular abnormality; the stomach was distended and showed on its mucous surface numerous superficial ecchymoses. The Heart showed the lesions chiefly interesting; the pericardium exhibited a number of irregular thickenings, apparently the remnants of old pericarditis; the ventricles were somewhat dilated, and the muscular substance appeared to be fatty, but no microscopical examination had been made. Two of the leaflets of the aortic valve showed masses of soft vegetations upon the ventricular surface, each surrounding a perforating ulcer, about the size of a crow-quill. The third leaflet was not affected by the ulcerative process, but was somewhat atheromatous upon the inner surface. At the base of one of the columnæ carneæ was a roughened spot about the size of a three-cent piece, and covered with membrane. On the upper surface of one leaflet of the mitral valve a similar mass of exudation was found, but it had no perforating ulcers. Aside from these lesions the heart was normal. The aorta showed advanced atheromatous change, as did also the great vessels and the radial arteries. The pulse, a few days after admission, gave the sphygmographic tracing usually seen, and said to be characteristic of aortic regurgitation with atheromatous arteries. (A sphygmographic tracing was exhibited.)

On looking at the case, it was seen that the only symptoms which pointed toward some morbid process besides acute rheumatism with the valvular lesion ordinarily accompanying it, were the roseola present on admission, the exacerbation of temperature without obvious causation, and the cachexia.

It was interesting to notice that there was a marked systolic murmur at the base and also at the apex. The latter was supposed by some to be evidence of mitral regurgitation. It is a recognized fact, however, that a systolic murmur at the apex is frequently heard when aortic regurgitation is present, and also that it does not mean necessarily mitral regurgitation.

Dr. Ferguson presented a dry specimen illustrating

VOLVULUS OF THE SIGMOID FLEXURE OF THE COLON.

It was taken from the body of a man thirty-seven years of age, married, and a native of Russia.

He complained on several occasions for years of violent abdominal pains and cramps, which passed away and

were similar in character to the trouble for which he had entered the House of Relief on February 27th. The attack for which he sought relief in the hospital had lasted three days previous to his admission. Commencing with a chill, which was followed after a short time by nausea and vomiting, he suffered severe and continuous pain in the abdomen. He was carefully conveyed by ambulance to the hospital, and while his condition was seemingly fair, after arrival he progressively and rapidly failed, and died within four hours after admission.

Autopsy.—Body well nourished; the abdomen was distended and in places presented a greenish hue; peritoneum contained three pints of bloody fluid; the colon was greatly distended; the sigmoid flexure was greatly distended with gas and blood; the wall of the gut in this location was everywhere hemorrhagic; the sigmoid flexure was twisted upon itself once, which prevented the passage of the contents of the large bowel downward; the small intestines were adherent to each other by recent lymph; the intestines throughout were distended and their peritoneal surface intensely hyperæmic; the organs of the thoracic cavity were normal; the organs of the abdominal cavity not referred to were also normal.

DR. WALDSTEIN said he had wondered that the condition of affairs seen in Dr. Ferguson's specimen did not exist more frequently than it did. He had very frequently found, at autopsy, the sigmoid flexure drawn over into the right side, and a corresponding kink in the descending colon, with immense dilatation of the transverse and ascending colon as far up as the cæcum. He had noticed it with special frequency in elderly persons whose omentum and mesentery were abundantly supplied with fat, and the condition must have existed for some time, as indicated by the enormous distention of the large intestine, perhaps depended upon some local peritoneal irritation or inflammation at the beginning of the volvulus.

PERI-RECTAL DERMOID CYST.

THE PRESIDENT presented a tuft of hair removed from a patient twenty-two years of age, who came to him about ten days previous for what was supposed to be a peri-rectal fistula. He had been in perfect health up to eight months ago, when he had what he supposed was a small boil, near the outside of the coccyx, which broke and had remained open. On introducing a probe, Dr. Wyeth found a sinus, but without an opening toward the rectum. He had nearly finished scraping out the abscess with a Volkman spoon, when he noticed a very small opening that admitted a probe to the distance of an inch and a half, when the point of the instrument appeared in the abscess cavity. He then laid this cavity open, which communicated with the abscess proper, and found in the bottom of the furrow a tuft of hairs, the longest of which was two inches in length.

The specimen, so far as the President knew, was unique, and the only explanation which he could offer was that a groove-like inversion of the epiblast took place, and that the tissue designed to produce hair did subsequently develop this growth, and gave rise to a form of dermoid cyst.

DR. FERGUSON said that congenital cysts in the locality of the sacrum were somewhat frequent, and referred to two reported by Dr. Fowler, of Brooklyn, in the *Annals of Surgery*, both of which were lined with cylindrical ciliated epithelium, and the contents of the cysts consisted mainly of these cells, with some cholesterine crystals. They were situated, in Dr. Fowler's cases, higher upon the sacrum than in Dr. Wyeth's case.

DR. JACOBI said that, from what he knew of dermoid cysts, the large majority of them were found inside rather than outside of the coccyx, between the rectum and coccyx, also between the rectum and the vagina. He remembered to have met with quite a number, and such cases were reported to be quite frequent.

The Society then went into executive session.

Correspondence.

OUR CARDIFF LETTER.

(From our Special Correspondent.)

CARDIFF, SOUTH WALES, August 2, 1885.

THE annual meeting just concluded has been most successful. No unpleasant incident has occurred to mar the proceedings. The weather has been very propitious. At the commencement of the meeting the heat was, it is true, very great, but it has gradually diminished until now the weather is simply delightful. I think the number of members attending is scarcely as great as at last year's meeting at Belfast, but it has not been far short, and the average attendance in the sections has been very good. The proportion of consulting practitioners attending has certainly been larger. I met quite a number of representative men distinguished in their several branches. Among the London consultants present were Dr. Wilks, Dr. Priestley, Dr. Playfair, Dr. Pavy, Dr. Sidney Coupland, Dr. Prosser James, Dr. Bristowe, Dr. Isambard Owen, Dr. Herringham, Dr. Edis, Dr. Gervis, Dr. Grigg, Dr. Hack Tuke, Dr. J. Milner Fothergill, Dr. Drysdale, Dr. J. F. Payne, Dr. Murrell, Dr. Woakes, Dr. Snow, Dr. Dudley Buxton, Professor Marshall, Mr. Erichsen, Mr. Henry Power, Mr. William Adams, Mr. Macnamara, Mr. Edmund Owen, Mr. Treves, Mr. George Field, Mr. Malcolm Morris, Mr. Mansell-Moullin, Mr. Knowsley Thornton, Mr. Keetley, Mr. Bernard Roth, and others. Mr. Reginald Harrison, Dr. Barr, and Dr. Imlach came from Liverpool; Dr. William Roberts and Dr. Walter, from Manchester; Mr. Lawson Tait, from Birmingham; Dr. W. R. Thomas, from Sheffield; Dr. Spender, from Bath; Dr. Reid, from Glasgow; Dr. Berry Hart, Dr. Freeland Balfour, Dr. Byron Bramwell, and Professor Fraser, from Edinburgh; Dr. Jacob, from Dublin; Dr. Cuming, from Belfast, and many others of note from various parts. Several Americans were present, among them were Drs. Duncan, Bulkley, and Stein, of New York, and Dr. Wilson, of Baltimore. The President of the Jamaica branch was present, as were also several medical men from the southern hemisphere. Professor Lesshaft, of St. Petersburg, also attended, and read two papers.

This is not the first visit of the Association to South Wales. In 1853 the annual meeting was held at Swansea. A considerable increase in the number of members has taken place in the thirty-two years which have elapsed between now and then. In 1853 there were only 1,853 members. Now there are 11,249 members. This shows a very great increase, and when we remember that the Association started in 1832 with a muster-roll of only 200 members, its growth is still more marked. There are now thirty-nine branches in Great Britain and Ireland, India, and the Colonies. The invested funds of the Association, exclusive of certain moneys held on trust for special objects, amount to nearly twenty thousand pounds.

Cardiff is a town excellently suited for the purpose of a large meeting, such as that of the Association. It has a population numbering nearly one hundred thousand, and there is ample hotel and apartment accommodation. Private hospitalities, too, abound. There are numerous objects of interest both in Cardiff and the immediate neighborhood. Among these the first place must certainly be awarded to the Bute Docks. As a port, Cardiff ranks third in the kingdom, London being first, and Liverpool second. The Bute Docks are the private property of the Marquis of Bute, who has expended upward of three million pounds upon them, and is still further enlarging them. The docks possess the largest basin in the kingdom. The water from the Severn and Bristol Channel is not admitted to the docks, being so heavily charged with mud, but the docks are kept filled with fresh water from the river Taff, brought to them through a canal which has been constructed for the pur-

pose, and is termed locally "The Feeder." The depth of water in the docks is thus quite unaffected by the tides. At low water the outside of the dock gates is left quite bare by the receding tide, while inside there is thirty-eight feet in depth of (fresh) water. A new dock of forty-seven acres in extent is being constructed. On two mornings running parties of members were taken to see the docks, the railway train being run down an incline to the bottom of the one in construction. The view there was very imposing, the dock walls being fifty feet in height. The "steam navvy" was seen at work, most of the excavating being done by it. We also saw the hydraulic "tip" for coaling ships. Our visit had the advantage of the genial guidance of the chief engineer, Mr. McConnochie, C.E. I am digressing, however, and must return to more strictly medical subjects.

The first day's proceedings went off without any perceptible hitch, though an animated discussion took place over the Council report. One gentleman who got up to speak was interrupted by the President of the Council (Dr. Balthazar Foster), who wished to explain then and there a point raised by the speaker (Mr. George Brown). The latter, however, refused to give way. Dr. Foster, he said, would have the right to reply at the end of the discussion, and if he allowed Dr. Foster to reply then out of his ten minutes, he should have to sit down when the sand-glass had run down, and would have lost part of his time. The report of the Council was finally adopted by an overwhelming majority. The Council has thus been authorized to carry out the scheme proposed by them for purchasing a site in London and building their own premises thereon, instead of continuing to rent as at present. The Association are their own printers and publishers, and have effected a large saving thereby. In addition to building, printing, and publishing offices they have determined to erect a Council chamber, reading-rooms, and rooms for the use of members when in London. It is estimated that to carry out this scheme (which has now been sanctioned by the Association) will cost from twenty to twenty-five thousand pounds. This represents the entire accumulated capital of the Association, or, as one speaker put it, their accumulated savings since the foundation of their society fifty-three years ago. It is hoped to avoid sinking the whole of the large sum mentioned above by renting a site on a long lease, and paying a ground-rent of three or four hundred pounds annually, instead of laying down so many thousands in purchase money. Your readers must remember that twenty thousand pounds means one hundred thousand dollars.

In the evening the *pièce de résistance* was the Address of the President, Dr. W. T. Edwards, of Cardiff. As usual on these occasions, he read it from a copy he held in his hand. Some delay took place before Dr. Edwards commenced reading his address, as on attempting to do so he found he had not sufficient light. After two apologies for the delay a pair of candles was at length obtained. Dr. Edwards said he had no learned leisure to prepare an elaborate address, and he would therefore give a few plain words chiefly of local reference. He gave a very interesting account of Cardiff, its history, antiquities, medical institutions, and sanitation, concluding by making some reference to the immense progress made by the Association since the former meeting in South Wales in 1853. The old saying, "Ubi tres medicos," etc., was certainly not verified on this occasion, as no sign of disapproval was evinced by the allusion Dr. Edwards made (in concluding his address) to the work of Him who came on a divine mission, but who accomplished his purpose largely through ministering to the bodies and healing the diseases of men.

Dr. Edwards sat down amid rounds of hearty applause, which were none the less hearty that the address was brief.

Dr. Strange, of Worcester (President at the Jubilee Meeting in 1882), said Dr. Edwards' address was much shorter than that he had himself delivered at Worcester, but he thought it was also much better. Many people preferred short addresses. Dr. Strange might have added "especially in such hot weather." The heat was indeed intense, much more than could have been expected even in July. Those who travelled here by rail on Monday will long remember the journey. It was almost like being in a Turkish bath with one's clothes on.

During the delivery of the presidential address much merriment was caused by Dr. Edwards stopping and turning round to reprove Dr. Balthazar Foster, who was chattering away in a low tone to his neighbors on the platform. Dr. Edwards looked round once or twice at Dr. Foster, and finding he took no notice, at length deliberately stopped and turning round and putting his hand on his shoulder, said: "I must call our President of the Council to order. He has been a President longer than I have and has got over his nervousness. I have not." When thus publicly rebuked, Dr. Foster at once subsided and Dr. Edwards proceeded amid ringing laughter and applause.

A good deal of merriment was again evoked by Dr. Edwards in returning thanks for the vote of thanks for his address. He frankly confessed that he had looked forward to its delivery with a good deal of trepidation and was glad he had got it over.

(To be continued.)

THE TREATMENT OF MASTITIS BY REST AND COMPRESSION.

To The Editor of The Medical Record.

SIR: The object of this communication is to review certain assertions contained in an article on "The Treatment of Mastitis by Rest and Compression," by Dr. W. F. Milroy, of Omaha, Neb., which appeared in The Record of August 8, 1885. He opens his article in your journal as follows: "While house-surgeon to Maternity Hospital, New York City, a year ago, during the service of Dr. Paul F. Mundé, and through his kindness, I had an opportunity of developing an idea which resulted in the adoption of this mode of treatment in all of our cases in which this calamity threatened." Dr. Milroy introduces in his article the history of a case of mastitis occurring in a woman confined June 17, 1884. Judging from the history given and from a statement elsewhere contained in his article, this was the case in which Dr. Milroy began the treatment of mastitis by rest and compression.

Dr. Milroy makes frequent reference to a paper written by myself, which was based upon eight years' experience in bandaging for breast troubles. This paper was completed in June, 1884, and immediately forwarded to Dr. Paul F. Mundé for publication in *The American Journal of Obstetrics*. A few days later I received a letter from Dr. Mundé, a portion of which I here produce:

"20 West Forty-fifth Street, New York, June 11, 1884.

"Dr. P. A. Harris:

"Dear Doctor—I have looked through your very thorough paper on the 'Treatment of Mastitis, etc.,' and will accept it, if you will consent to wait until October for its publication. I am actually overcrowded and cannot possibly find room for it before. . . .

"Yours truly,

"Paul F. Mundé."

The doctor finally arranged that the paper should be published in the numbers for January and February of the present year.

It will be seen that Dr. Mundé's acceptance of my paper is dated June 11, 1884, and Dr. Milroy first employed his compression and rest under the service of Dr. Mundé, June 23d, of the same year.

The next paragraph in Dr. Milroy's paper to which I would direct attention is the following: "It will be observed that the most essential point of difference between

this treatment and that of Dr. Harris consists in the employment of *firm* pressure instead of the slight pressure which he," Dr. Harris, "recommends."

Regarding the degree of compression required for remedial effect, long experience has convinced me that the best and most grateful results are obtained from moderate compression combined with lifting the gland, this last-named measure being particularly valuable to those patients who are out of bed.

The degree of support which it is possible to obtain from any bandage or appliance that rises but little higher in transverse line than the axillæ, bears no comparison to the lifting effect of any good method of dressing which includes or passes over the shoulders.

Dr. Milroy quotes from my paper an assertion "that the many-tailed bandage, as employed by Dr. Dugas, is objectionable, because it tends to flatten the breast, and press it out of form." Dr. Milroy admits that the many-tailed bandage long since employed by Dr. Dugas is, in its action, so nearly like his own that my objection to Dr. Dugas' treatment might apply with equal force to his (Dr. Milroy's) plan. It certainly does, and I still claim that, everything considered, a change from my method of bandaging which *compresses*, *lifts*, and tends to maintain the *natural form* of the breast, to another which has little or *no* lifting effect, and exerts compression only while pressing the breast out of form, would be a step backward.

Again, Dr. Milroy asserts as follows: "Now, it must be apparent to any who reads the description of the application of Dr. Harris' bandage, that its complexity will deter very many from attempting its use, and many more from succeeding in it. Let him who does not think so make trial of it once."

Dr. Milroy does not squarely say that he has failed in the application of my bandage. We might infer, however, that such is the case. The dressing has, to my knowledge, been applied successfully, not only by surgeons, but by physicians making no claim to the practice of surgery, and I have yet to learn of the failure or inability of any physician to apply the bandage as I have directed. Dr. Milroy drifts still further, and almost insinuates that I am incapable of applying my own bandage, as may be judged by the following quotation from his paper: "When a man of Velpeau's genius meets with so much difficulty," in applying and retaining the bandage, "it is hardly possible that the use of eighteen large safety-pins, as suggested by Dr. Harris, can obviate the whole difficulty."

Let me assure Dr. Milroy that the use of ten or twelve large safety pins does "obviate the whole difficulty," not in my hands alone, but in the experience of many others who will no doubt cheerfully verify my assertions in this relation.

Another objection to my dressing raised by Dr. Milroy is that the patient must assume the sitting posture during its application. This objection is reasonable with physicians who argue that it is especially dangerous for the puerperal woman to sit up in bed before the seventh day. In consequence of the teachings of Drs. Engelmann, Dugas, and others, the practice of the profession has become modified in this particular, and many having abandoned the rule of long recumbent posture, so zealously practised by our fathers, are able to allow their patients to assume the sitting posture for a short time when occasion demands.

Dr. Milroy has scarcely alluded to, much less emphasized, other and very important principles which my treatment involves. I will omit mention of them here, it being my intention to supplement my original paper when the experience of other physicians in the application of the bandage will be added to my own.

I am, sir, yours very truly,

PHILANDER A. HARRIS.

26 CHURCH STREET, PATERSON, N. J.,
August 10, 1885.

Army and Navy News.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from August 8, 1885, to August 15, 1885.

CAMPBELL, JOHN, Colonel and Surgeon. Granted leave of absence for one month.

IVES, FRANCIS J., First Lieutenant and Assistant Surgeon (recently appointed). Ordered for duty in Department of Platte. S. O. 184, A. G. O., August 13, 1885.

AZPULL, THOMAS F., Captain and Assistant Surgeon. Retired from active service, August 10, 1885. S. O. 181, A. G. O., August 10, 1885.

CHAPIN, A. R., First Lieutenant and Assistant Surgeon. Granted one month's leave, to take effect when services can be spared by commanding general, Department of Missouri, with permission to apply for one month's extension. S. O. 179, A. G. O., August 6, 1885.

WALES, PHILIP G., First Lieutenant and Assistant Surgeon (Fort Cœur d'Alene, Idaho). Ordered for temporary duty at Boise Barracks, Idaho. S. O. 130, Department of Colorado, August 1, 1885.

KENDALL, WILLIAM P. Appointed to be Assistant Surgeon, U. S. Army, with the rank of First Lieutenant, to date from August 12, 1885.

Official List of Changes in the Medical Corps of the U. S. Navy for the week ending August 15, 1885.

BEYER, H. G., Passed Assistant Surgeon. To attend meeting of the American Association for Advancement of Sciences, at Ann Arbor, Mich., and at conclusion of meeting to resume duty at the Smithsonian Institute.

BOYD, JOHN C., Passed Assistant Surgeon. From Navy Yard, Washington, D.C., to special duty at Bureau of Medicine and Surgery, Washington, Navy Department.

LIPPINCOTT, J. C., Passed Assistant Surgeon. To Navy Yard, Washington, D.C., as relief of Passed Assistant Surgeon Boyd.

OWENS, THOMAS, Assistant Surgeon. From special duty at Bureau of Medicine and Surgery, Navy Department, and waiting orders.

SAYRE, J. S., Assistant Surgeon. From U. S. P. S. Independence, to Naval Hospital, Mare Island, Cal.

A NEW METHOD OF ADMINISTERING PEPSIN.—Dr. Prosser James writes in the *British Medical Journal* of May 16, 1885, describing a new form of pepsin. The object which he set before himself was that of preparing pepsin that could be taken in the natural way; that is, a little at a time and not all at once in a large single dose. But patients object often to taking even one dose at meal-time and would be probably with difficulty persuaded to take several at intervals of eating. The wine is ineffectual, as it precipitates the pepsin. A simple mixture of pepsin with salt may be successfully employed as a digestive condiment, provided it be freshly prepared each time; but such a mixture, if kept, is apt to decompose. How to overcome this difficulty was the next problem, but this was solved by bringing the chloride and the pepsin together in such a way as to form a compound, possibly a pepto-chloride. Whether such union occur or not, the compound, Dr. James says, is quite stable. It is a powder having a slight color, but when used as a table-salt is nearly indistinguishable from that condiment. It is called "peptic salt" or "digestive salt," and its use has already given satisfaction in several cases.

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Original Articles.

BRONCHITIS—ACUTE AND CHRONIC.

By J. MILNER FOTHERGILL, M.D. EDIN., HON. M.D. RUSH MED. COLL., ILL.

PHYSICIAN TO THE CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST (VICTORIA PARK).

ACUTE bronchitis is a malady fraught with great danger to life in the very young, the very old, and in those already enfeebled by pre-existing disease. With robust persons in youth and middle age it is comparatively rarely fatal. It is, then, a malady which taxes the bodily powers; if they can be maintained, then all is well, and the disease runs its course safely. Failure of the powers is the matter upon which the physician must keep an unwinking eye. If he loses sight of this cardinal matter the case may easily slip through his fingers.

Bronchitis has its two distinct stages, each requiring its own appropriate treatment. There is, 1, the stage of arrested secretion, and, 2, the stage of excessive secretion.

1. Stage of arrested secretion. Cold is probably the excitant of bronchial inflammation. The poor baby crying in the cold, taking in the chilly air by its mouth, and thus missing the warming plates of the turbinated bones, is usually the victim of bronchitis a few days subsequently. A garrulous old man is talking in a keen wind, and the same result follows. Of course the deed is done before medical aid is sought. In bronchitis distinct rigors are rarely experienced, merely some chilliness, or at most a feeling of some cold water running down the back. The respiration is labored, because the swollen bronchial mucous membrane lessens the bore, calibre, or lumen of the bronchial tubes. Of course, the finer the tubes implicated the more this is felt. When the fine tubes are largely affected, then the attack is termed "capillary bronchitis," and the danger to life is great. Such is the bronchitis set up by a thick London fog, which often slays its hundreds of victims. The expectorated phlegm, when the secretion stage is reached, is not the white froth of ordinary bronchitis, but a grayish mass not unlike an oyster in hue and bulk. Where the larger bronchiæ are chiefly the seat of disease then the malady is comparatively insignificant.

In the first stage of bronchial dryness there is usually much irritation, much useless unavailing cough, for there is, as yet, nothing to be got up. The skin is usually dry. There is rarely marked pyrexia. The first step is to soothe the irritated membrane and to secure secretion. Relaxants are indicated, and of old nitrate of potash, with tartar emetic, would have been the line taken, with some opium and Plummer's pill at bedtime. The indications are to relax the swollen, turgid, dry mucous membrane, and to relieve the cough. The local application of steam, plain or medicated, by means of the "bronchitis kettle," is always good, and can be continued at intervals for hours, indeed until the desired end be attained. Then if there be much complaint of rawness or soreness down the sternum, counter-irritation over the front of the chest is often very useful. As a pupil of the late Professor J. Hughes Bennett, of Edinburgh, of course I did not believe in counter-irritants on starting practice; but my results were so far below those attained by my father, on the old-fashioned plan, that, perforce, I was driven to follow his plan or lose the patients. The best counter-irritant is undoubtedly croton-oil liniment; but it has the drawback of its effects if any other parts of the body, especially where the skin is tender, be accidentally touched by it. Especially is such counter-irritation required by robust countrymen. Then as to the general treatment.

At bedtime a dose of Dover's powder may be indicated, or a grain of opium with James' powder. If a robust man, a few grains of calomel may not be out of place. Whatever may be the objections to the use of opium later on—and they are overwhelming—the sole objection to its employment at this stage is its effect in arresting bronchial secretion. If there be much suffering and irritative cough, the lesser of two evils may be some opiate. Then, if a robust person, the treatment may consist of vin. antim., ℥ xv., vel tinct. aconite, ℥ xv.; sp. mindereri, ℥ j., t.i.d. If a delicate person, pot. iod., gr. iij., sp. mindereri, ℥ j.; t.i.d. (sp. mindereri is liquor ammoniæ acetatis). Hot bottles in bed help to procure free perspiration, by which the general vascular turgescence is relieved, and that of the bronchial mucous membrane as well—the thing desired. In one case encountered in my early days, the young man had repeated attacks of bronchitis, always stubborn in the first stage, for which my father bled him with excellent results; and I had to bleed in another attack after having exhausted my armamentarium of less heroic remedies. When the skin is got to act freely, then the bronchial membrane loses its irritability and secretion sets in, and the case enters upon its second stage.

2. Stage of excessive secretion. With the change in the condition of affairs comes the corresponding change in the treatment. Our object now is not to relieve the discomfort and promote secretion, but to enable the patient to get up the secretion with which the air-tubes are more or less choked, and which, if not got rid of, will accumulate and suffocate the patient. Now comes the struggle between the malady and the patient's power of endurance. No depressants are required now. Opium will arrest the secretion and clog up the bronchiæ. The patient may be wearied with the fight and crave for sleep, begging hard for a narcotic. A narcotic! Why, if it were not for the absolute necessity for voluntary effort to maintain the respiration, the patient would be off to sleep—like Damian in the intervals of the rack—without any need for a narcotic. To give a narcotic is to paralyze those very efforts without which life would soon ebb out. The patient is breathing for dear life, and what we have to do is to help the taxed organism to maintain the struggle. To drag the air through the obstructed air-tubes is trying work. Then cough is required to get up the obstructing mucus. What we now require, *par excellence*, are stimulants to the respiratory centre. The best known of these are ammonia, atropia, strychnia, ipecacuan, and squills. The combination might stand thus:

℞. Amm. carb. ..... gr. iv.
Tinct. nuc. vom. ..... ℥ x.
Inf. cinchonæ. ..... ℥ j.
4tâ vel 6tâ horâ.

If it be desired to keep up the secretion, then serpentaria might be substituted for the cinchonæ. Senega is in repute, but its taste is most objectionable; it it be used, some spirits of chloroform must be added, by which it is rendered much less offensive. If the case be a bad one,

probably the above combination had best be adhered to. If life is not gravely endangered, then

℞. Liq. atropiæ..... ♏ j.
Liq. am. anisat..... ♏ xv.
Aq..... ʒ j.
M. 6tâ vel 4tâ horâ,

may be preferable. If the case be mild, then

℞. Ac. hydrobrom..... 3 ss.
Sp. myristicæ..... ♏ ij.
Syr. scillæ..... 3 ss.
Sp. chloroform..... ♏ xv.
Aq..... ʒ j.
M. Three or four times daily.

may be sufficient; and a very elegant and palatable cough mixture this forms.

Bronchitis runs a definite course; and here, as in fevers, to tide the patient over the limited time is to save him. Failure of the powers under the demand upon them is the danger to be steadily kept in view. These powers must be sustained by meat-broths containing baked flour (*i.e.*, starch largely converted into soluble dextrine) and milk, with malt extracts or malted preparations; in fact, food containing grape-sugar—the natural food of the body. Alcohol may be indispensable, and must be given with no niggard hand if need be. Support! Supporting measures of all kinds in unstinted quantities are indicated. But there is one part of the organism that specially needs support, and that is the right ventricle. The strain on the right heart is at times tremendous, and failure of the right ventricle is the common cause of death. The right ventricle of a dugong, or other diving mammal, would be a grand acquisition in a bad case of bronchitis. If there be a pre-existing mitral lesion, then the state of the right heart is a cause of the gravest anxiety.

On commencing practice a number of cases of bronchitis went the wrong way, despite my utmost efforts. Chagrined and complaining of this one day to an old practitioner, and saying that in each case there was a mitral lesion, he consoled me thus: "You will find such cases will all die!" This was comfort of a kind; but the remark induced me after that to take the condition of the right heart into my calculations; and after that my results were more satisfactory. Digitalis was added to the mixture; and then my old friend's forecast was falsified! A hot bottle, or hot bran-bag, or hot poultice over the front of the chest is not only comfortable, but it keeps up the action of the heart, as well as loosens the phlegm

Acute bronchitis may occur primarily and leave a chronic condition behind it, or it may occur as an intercurrent condition in a case of chronic bronchitis. When acute bronchitis is a primary malady it usually leaves behind a certain amount of vesicular emphysema, which in young subjects usually disappears; but occasionally one comes across a case of chronic bronchitis with well-marked emphysema in a girl barely in her teens. For aiding the recovery of the lung-elasticity strychnia seems to me the best drug. As to the resultant chronic bronchial condition, it may require iron in atonic cases. In gouty cases solvents of uric acid, potash, and lithia are indicated. Balsamic remedies are useful in all chronic catarrhal conditions of mucous surfaces, from urethritis to a bronchial flux.

Chronic bronchitis.—This condition usually dates from some acute attack in the past, sometimes in the by-past. It may be a rheum without any true inflammatory first stage. As such it is an outcome of mitral disease, often masking the cardiac condition. Rarely, if ever, is it found without more or less emphysema. Every acute exacerbation leaves a worse condition of emphysema behind it. In the young the lung largely recovers, but not so in older subjects. Pursy or broken-winded before a new acute attack, the chronic bronchitic comes out of the struggle worse broken-winded than before. The efforts of coughing have further strained or ruptured lung tissue no longer possessed of the elasticity of early years. Consequently it is of great importance to avoid all acute bronchial trouble as far as possible.

This condition of emphysema is one of great clinical interest. Ordinarily it is assumed that emphysematous persons are barrel-chested. This is a very crude view. Of course, all are most familiar with the barrel-chested, red-faced, blue-lipped, puffing persons obviously emphysematous. At each inspiration the sterno-mastoid muscles are seen to stand out like plough-cords. Often the skin between them can be seen to be sucked in simultaneously—deep fossæ being formed. The act of inspiration is a laborious one. Except when bustled by effort, the respiratory act is not increased in number per minute. The acceleration produced by effort will often tell more accurately than physical examination of the chest of the actual extent of the emphysema. If the patient be in bed, the respiration is seen to be distinctly abdominal. The comparatively immovable thoracic case is lifted up bodily by the neck muscles while the diaphragm descends. The lungs are too full of air even upon complete expiration. If called upon to speak, the patient will rest his elbow upon the nearest object, so as to fix the shoulder, and then take a breath. If sitting, both hands will be seen resting on the thighs so as to fix the shoulders, and thus get the benefit of the accessory muscles of respiration. On physical examination cardiac dulness is more or less completely lost from the attenuated lung spreading over the heart. The liver dulness does not commence till the ribs are nearly reached, and then the liver, pushed downward, is found extending considerably beyond the border of the ribs. The diaphragm of the emphysematous person is flattened; it is dragged down by the violent inspiratory efforts, while the voluminous lungs obstruct its return. The viscera on the abdominal side of the diaphragm are pushed down bodily. The thoracic space is thus increased. But if the abdomen be distended with flatus, then the descent of the diaphragm is impeded, and a condition of "asthma" is set up. Indeed, "wind" is the plague of their lives with emphysematous persons, with or without bronchitis.

All chronic bronchitic persons are more or less emphysematous, and therefore what has just been said applies to them. In addition, they have often some thickening of the bronchial lining membrane, which adds to their dyspnœa. Sometimes they have genuine attacks of spasmodic asthma.

The lines upon which such cases are to be treated are as follows: The respiration is embarrassed, and, therefore, a stimulant to the respiratory centre is indicated. So strychnia comes first. Then it is well to keep the bronchial secretion free and unchecked, and for this end ipecacuan suggests itself. But ipecacuan is a tonic to the liver as well, and so is doubly useful when there is nervous congestion. Some might add some benzoic acid. The right heart is embarrassed, so some digitalis will be useful. Then as to carminatives for the "wind." The essential oils, the peppers, and the nauseous gums are all good for flatulence. In pill form, a good combination is as follows:

℞. Strychniæ..... gr. 1/24.
Pulv. ipecacuan..... gr. ½.
Pulv. digitalis..... gr. ⅓.
Pil. galban. co..... gr. ij.
Bis aut ter in die.

If the bowels are not regular, a small quantity of podophyllin or croton oil may be added. To some readers such a compound may seem ridiculous. A derisive smile may flit over the features, betraying what is passing through the mind. But all the same this pill has done wonders for a large number of persons whom I know and have prescribed for.

And now as to rest at night, a very important matter. It may be well to try a mixture, so:

℞. Bromidi ammoni..... ... ℈ j.
Tinct. camphoræ..... ʒ j.
M.

A favorite night pill with my late father, who had an extensive experience of bronchitis in all forms, was:

℞. Morphiæ mur..... gr. ¼
Benzoic acid..... gr. j.
Pil. scillæ co..... gr. ij.
M.

Here the benzoic acid counteracted the effect of the morphia upon the bronchial mucous membrane, and prevented arrest of the secretion. And such a pill really does give a great deal of comfort to old bronchitics whose rest at night is broken by bouts of coughing. Paregoric or tinct. camph. co. is a compound built upon this plan, and is often of great service where opium or morphia alone are baneful remedies.

Usually on leaving the recumbent posture on waking a coughing bout commences. Phlegm has gathered during the night on parts which have become more or less accustomed to it. But with movement the phlegm is dislodged, and then cough is set up for its removal. The accumulation of the night is thus got up after much exertion, and then the chest is comparatively clear of phlegm, and comfortable. Sometimes the morning cough is trying, and shakes the sufferer terribly. Some hot tea or other hot fluid affords relief; while it is well to teach the patient how to cough properly. There may be no education possible or required in the matter of sneezing, but certainly this is not the case with coughing. The patient must be taught to fill the chest with air before giving way to the expiratory action—cough. Watch a person who has never learned to cough. See the futile attempts. The shallow inspiration, the useless, impotent cough. At last a paroxysm of cough comes on, the chest become fully inflated, and then the cough which follows expels the offending phlegm, a sense of relief following its ejection. When we reflect upon the sacculated condition of the bronchial tubes, and remember the firm wall of hardened-lung tissue of these bronchiectases, we can see how full inflation of the lung is essential for such compression as alone can force out the contents of such sac. To first fill the chest with air is the one condition of successful cough. To learn to do this is to save much useless coughing, and much strain upon the lung-tissue, leading to further emphysema. So much for learning to cough.

When the phlegm is hard to get up, from some check to the bronchial secretion, the inhalations of steam are good, and iodine, Friar's balsam, eucalyptus, and other agents may be added to the steam. Some persons burn benzoin pastilles.

For attacks of "asthma" the different "fuming" remedies advocated in the article on "Asthma" (MEDICAL RECORD, August 8, p. 141) are indicated.

There are some points about the clothes and hygiene of chronic bronchitics worthy of mention. They are a chilly race, from impaired oxygenation and defective heat production. They are scant of breath and cannot get about. They must be warmly clad; yet they cannot bear any weight of clothes. Consequently their clothing must be light as well as warm. Furs in the daytime out-of-doors; down bed-quilts for the night. Warm underclothing in the day; and a flannel night-gown. On cold nights a fire in the bedroom is good. A respirator is invaluable for preventing fresh attacks of cold. Fifteen years' experience of a respirator has told me its value and entitles me to speak. Never mind its unsightliness; or the remarks it may provoke on the part of the thoughtless, or even the sympathy of others. Like the gloves, it should always accompany hat and stick. If it had not been for a respirator the writer would have been a pursy, broken-down bronchitic, instead of a well and fairly preserved man approaching middle age.

Then, again, remember the position of the liver. Pushed out of its warm nook, thrust down so that much of it is only covered by the thin abdominal parietes, it is liable to chills. Consequently a cummerbund, or broad belt of several thicknesses of flannel, is most desirable. This protects both the liver and the kidneys. Specially is this last matter of moment where there is a gouty element in the case—a very common complication. The food should not be too highly albuminous; and the patient ought to be encouraged to take fat as far as possible in any and every form.

By such measures the chronic bronchitic may live on for years—practically on sufferance, *i.e.*, by taking proper care, death being the result of neglect or forgetfulness.

OPERATIONS FOR SALPINGITIS.[1]

BY W. GILL WYLIE, M.D.,
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I HAVE eleven specimens of diseased uterine appendages, removed since I presented fourteen in January last. What I have to say is but supplementary to my recent paper upon this subject, read before the New York Academy of Medicine. Of the eleven, all but one recovered. The one that died was a case of pyo-salpinx. The left tube was distended with about two ounces of dirty grumous pus. I succeeded in elevating it without its bursting, although it was firmly fixed by extensive adhesions. Great care was taken to prevent the escape of any of the pus into the peritoneal cavity, but I learned afterward that the same sponges in which the pus was caught were used again during the operation. Of the twenty-five cases, nine were private cases, and all recovered; sixteen were hospital cases, and three were lost.

These cases were all carefully treated before resorting to the operation. Pledgets of cotton saturated with a solution of boro-glyceride, alum, and glycerine were inserted in the vagina twice a week to improve the local circulation and soften out indurated tissues. After the uterus became movable to more or less extent, those suffering with menorrhagia were curetted, while in those suffering with dysmenorrhœa the os was dilated and the lining membrane treated; in most cases the dysmenorrhœa was relieved. I have about reached the conclusion that when the lining membrane of the uterus is neither diseased nor congested dysmenorrhœa is very rare, that the congestion preceding the menses may cause pain, and often is associated with local peritonitis, but that the flow certainly, in many cases, gives relief to the pain caused by diseased tubes and ovaries.

The cases were selected for operation not because they were favorable or likely to be easy. In every instance the patients were bedridden invalids or were totally unfitted to do ordinary work and keep out of the hospital or the poorhouse. With the exception of three or four all had extensive adhesions, and only one of the twenty-five had no adhesions. The majority were well-marked cases of pyo-salpinx, several were complicated by pelvic abscesses and hectic fever. I have never yet opened a patient and failed to find and lift up and remove the appendages on account of adhesions. So far I never had hemorrhage take place after the operation. The three cases lost were hospital patients, and on account of the extensive adhesions the abdominal cavity was exposed. All died from septic poison on the fifth or sixth day. The death-rate of twelve per cent. is not high, even when compared with the European operators, for if I had eliminated those with pelvic abscess, etc., and put them in different tables, a different showing could be made. In Bellevue we labor under many disadvantages; our means of isolation are imperfect, and our assistants are changed every six months, and it is easy to

[1] Presented to the New York Pathological Society at its meeting, June 24, 1885.

have a record spoiled by one poor assistant. Comparing this with other laparotomies that I have done, the death-rate is just the same. Of twenty-five laparotomies of different kinds of tumors, three died, but one of these was hysterectomy for cancer, and another hysterectomy for the removal of a fifty-pound fibroid, and both were done in Bellevue Hospital.

Leaving out all hysterectomies, and I have had only one death in twenty-one laparotomies, other than those for removal of the tubes. In twenty-four laparotomies, done in private practice, I have lost only one, and that was my first ovariotomy, where I attempted to enucleate a large cyst that was strongly adherent all over its surface. Since then I have in all such cases removed only a part of the sac, and sewed the remainder to the abdominal incision and drained the remaining pouch.

Case XV.—I. M——, a native of the United States, aged twenty-eight; married, has had seven children and four miscarriages; admitted October 1, 1884. She gives a history of almost constant and profuse leucorrhœa of a month's duration or longer. Complains of slight pain in back. States that about three weeks ago she experienced an attack of faintness. Since then she has been very constipated, and has had heavy dragging sensations about the rectum. Physical examination shows a large fluctuating tumor, the size of a large cocoanut, situated behind, below, and to left of uterus, which is large, subinvoluted, and pushed to left and forward. Pelvic hæmatocele was diagnosed, and this was confirmed by the withdrawal of a little brownish, broken-down blood with a small aspirator. Treatment: complete rest in bed, laxatives, tepid douches (1 to 10,000). November 8th, discharged improved.

On January 15, 1885, patient readmitted. Since discharge has had a severe attack of pelvic peritonitis and discharge of bloody matter per rectum. Comes to hospital complaining of severe pain in the left side. On examination small tumors on both sides; left very sensitive. Treatment: laxatives, douches, rest in bed, pancreatized milk.

January 19th.—Operation. Many adhesions found on both sides, completely embedding both tubes and ovaries, and attached to right ovary was what seemed to be sac of an old hæmatocele. The lumen of tubes were occluded by adhesions, and the ovaries degenerated, breaking into shreds in removal. Patient made a rapid recovery. Highest temperature was 100⅘°. Discharged February 23, 1885, cured.

Case XVI.—T. D——, native of Ireland, aged thirty-five; single, no children, no miscarriages; admitted November 2, 1884. Menstruation is regular, but is accompanied with pain; complains of bearing-down sensations when she stands, and of a soreness and of pain in left iliac region. Patient is hysterical. Examination shows uterus to be anteflexed and drawn to left side; there are signs of pelvic peritonitis; ovaries are enlarged and prolapsed. She was put on usual treatment of laxatives, douches, tampons, peptonized milk. No improvement, patient bedridden.

February 2d.—Operated on. There were numerous adhesions; tubes embedded in adhesions; ovaries enlarged and cystic, especially the right. Highest temperature, 101⅘°. Patient recovered entirely from the operation. She had a cough, due to phthisis.

Case XVII.—E. P——, a native of England, aged twenty-nine; a widow; has had three children and three miscarriages; admitted December 13, 1884. Menstruation has been profuse and attended with severe pain; leucorrhœa constant; complains of severe cutting pain in right iliac region, extending down the thigh; also of "bearing-down" pains; bowels habitually constipated; micturition painful. Examination showed signs of extensive pelvic peritonitis, uterus fixed in position, and tumor in right broad ligament, the left also thickened. Ordered rest, tampons, douches, on alternate days laxatives, pancreatized milk. General condition improved and uterus more movable.

February 28, 1885.—Tait's operation. There was some hemorrhage on account of adhesions having to be torn; the omentum and intestines adherent; right ovary large and congested, and tube seat of catarrhal inflammation, and one-half inch in diameter; left ovary cystic and enlarged. Patient soon recovered. Highest temperature, 101⅘. Kept under observation several weeks, local pain perfectly relieved and general health much improved.

Case XVIII.—M. C——, a native of Sweden, aged fifty; single; admitted February 18, 1885. Has had no children and no miscarriages, was treated for two years for vaginitis, supposed to be specific, and she gradually became so much of an invalid that she could not work. Patient still menstruates; with menstruation has had but little trouble; but now is unwell every second or third week. There is a constant yellowish discharge from uterus, and in considerable amount. For several years patient has suffered from pain in right iliac region and in back. The pain is described as "smarting," and is at times severe, keeping her much of the time in bed. Is troubled with constipation and painful micturition.

Physical examination: Both ovaries sensitive, and left prolapsed and plainly felt. Uterus enlarged and somewhat prolapsed. Patient was given complete rest in bed, douches and laxatives, and pancreatized milk a few days before operation.

Tait's operation on April 2, 1885. There were few adhesions. Three small fibroids in uterine wall posteriorly. Tubes enlarged, left ovary prolapsed. Patient made a good recovery. Highest temperature, 101°.

Case XIX.—D. S——, born in Germany; aged twenty-seven; married; admitted February 7, 1885. Has had two children and no miscarriages. Suffers from menorrhagia and severe pain in back, and in both iliac regions, though it is worse in left. Is habitually constipated. Hysteria well marked. Physical examination shows adhesions from pelvic peritonitis. After tampons, douches, and laxatives, curetting was done on February 23d. There was some improvement, less hemorrhage, but severe pains continued, especially in left side. Now that induration and thickening of peritoneum had disappeared, a tumor could be made out on left side.

April 6, 1885. Operated on. Adhesions of the left side were strong and extensive, completely covering the tube and ovary. Both ovaries cystic, the left enlarged. Both tubes were in a state of catarrhal inflammation and imperforate. Patient recovered without any trouble.

Case XX.—E. F——, a native of Ireland, aged twenty-three; single; admitted April 11, 1885. No children, no miscarriages. Menstruates every two weeks and loses much blood. Has severe pain before and during the flow. Leucorrhœa not constant. Suffers from darting pains in hypogastrium and in back. Examination reveals a tumor in left broad ligament. Usual treatment was carried out.

May 7, 1885, she was operated on. Strong adhesions on left side, the left ovary enlarged, and tube tensely dilated with pus to one-half its diameter. The right ovary and tube were diseased to less extent, but abscess involved ovary and end of tube, and were removed. After tube was lifted up, sponges were placed to prevent escape of contents of the tubes into cavity of peritoneum. Thick dirty pus squirted out in a stream with first cut of scissors.

Died May 11, 1885, on fifth day, from septic poisoning and gradual extension of local into general peritonitis. As no pus escaped into cavity, and the stump was carefully cauterized, it was probably the use of some of the same sponges with which the pus had been caught that infected the peritoneum. Drainage-tubes were used and washing out tried in vain. Coil of cold water, etc., were also resorted to.

Case XXI.—M. H——, a native of the United States, aged forty; married; no children, no miscarriages. Menstruation always regular. No leucorrhœa. Patient was

perfectly well until middle of last February. Since that time has suffered from pains in back, hypogastrium, in left iliac region, and in left thigh. This pain in the thigh was often severe, and resembled sciatica. Exam ination shows uterus to be enlarged, lifted upward, forward, and a little to the left, and fixed above pubic bone by a tumor as large as a baby's head, which seemed to be held down in pelvis by left broad ligament. When the tumor was first noticed, in February last, she says it felt about as large as an orange. Patient was kept under observation for two months. The tumor increased in size, and by end of this time felt like a thin cyst, and by one leading gynecologist was diagnosed as a simple cyst of broad ligament, and he recommended that it be opened per vaginam, etc. The fixation of the uterus and tumor, however, and the uncertainty of operations per vaginam on pelvic tumors, caused me to prefer laparotomy. After the usual preparatory treatment this operation was done, May 9, 1885. The left broad ligament was found very much thickened and spread over a fibro-cystic tumor of the left ovary. The left Fallopian tube was fully as large as the thumb, and six inches in length. A pint of yellowish fluid was drawn from the tumor by means of a trocar and cannula. It was found impossible to uproot the tumor from under the ligaments so as to secure a pedicle. About three-fourths of all the sac was removed, after the broad ligament had been tied next to the uterus, and as far to the left as posssible, thus allowing the intermediate parts, including about five inches of left Fallopian tube, to be cut away. The borders of the remnant of the sac were ligated and sewed into the abdominal wound, and a drainage-tube was put into the peritoneum above the tumor, and one into remnant of sac. Portions of the wall of the cyst, which at the bottom contained a flaky, gelatinous mass, were nearly an inch thick. The patient did well. In twelve days the ligatures came away, and in five weeks she was up and about.

Case XXII.—J. F——, a native of the United States, aged twenty-five; single; no children, no miscarriages. Menstruation has always been too frequent, and during the last four years has often occurred every two weeks, and has been attended with severe pain. There has been a yellowish discharge from the uterus, considerable in amount, and almost constant. She has suffered from pain in back and in iliac regions, especially the right, and since the age of eighteen these pains have been severe. She has also been troubled with constipation, headache, nausea, and vomiting. Nine months ago was treated for endometritis. This was followed by two or more attacks of pelvic peritonitis, which were supposed to be pelvic diseases. For past eight months has been bedridden, and has been in the habit of taking opium several times a day.

Physical examination shows both ovaries prolapsed and sensitive, the right enlarged. There are also unmistakable signs of adhesions, due to pelvic peritonitis.

May 17, 1885.—Operation after preparatory treatment. Both tubes were found catarrhal and enlarged, and covered with bands of adhesions. Fimbriæ of both tubes adherent and lumen obliterated. Although pulse was constantly over 105 and very weak previous to operation, she made an uninterrupted recovery. Five weeks after operation was sitting up in bed, and had taken no opium for ten days.

Case XXIII.—E. McC——, a native of Ireland, aged twenty-one; single, no children, no miscarriages. Has physical signs of first stage of phthisis. Admitted March 17, 1885. Menstruation regular until three years ago. Intervals have been prolonged to six weeks, but lately intervals have been too short and she has lost much blood. Always has great pain when unwell. Abundant leucorrhœal discharge of yellowish color. Patient is unable to work on account of pain, often severe, in iliac regions and in back. Is constipated. Micturition painful.

March 26th.—Cervix uteri dilated, which gave some relief from pain at menstrual periods. Physical examination shows signs of pelvic peritonitis and a small tumor on left side.

May 29, 1885.—Operation. There were few adhesions. Left ovary cystic. Right ovary not much diseased. Tubes seat of catarrhal inflammation. Patient made a rapid recovery.

Case XXIV.—J. R——, a German by birth, aged twenty-nine; married, no children, four miscarriages; admitted May 26, 1885. Menstruation is regular, but she loses a considerable amount of blood, and has severe pains during the flow. Some leucorrhœal discharge, white in character. For two years has suffered from sharp, burning pain in both iliac regions; also from headache and pain in back. Not very much constipated. Micturition accompanied with burning pain.

Physical examination: There was evidence of pelvic peritonitis, uterus fixed by old adhesions, and a tumor could be felt in the left broad ligament. It seemed about as large as a lemon, and was in a mass of adhesions. The right broad ligament was also thickened.

June 4, 1885, abdomen was opened by the usual incision; the omentum was adherent over the uterus and broad ligament. It was removed, and some adhesions of the intestines were separated, and the enlarged and adherent tube and broad ligament was unrolled from the cystic ovary on the left side. A cyst of the left ovary as large as a lemon was removed with the tube without breaking. The right tube and ovary were found also diseased and removed, the lumen of both tubes were occluded by adhesion of the fimbriated extremities.

Patient made a good recovery.

Case XXV.—A. M——, born in United States, aged twenty-six; married, one child, one miscarriage; admitted June 13, 1885. Menstruation always too frequent; duration about one week, always attended with severe pain. For a year has had a yellow and stringy leucorrhœal discharge. Complains of severe pains in sides and in back. Habitually constipated, and suffers from headache. More or less bedridden.

Physical examination: Uterus fixed to some extent by old adhesions due to pelvic peritonitis. Both broad ligaments thickened. After usual treatment she was operated on June 17, 1885. When the adherent omentum was removed the left tube was found curled backward toward the uterus, with its fimbriæ firmly adherent to the anterior wall of the uterus, and it was found necessary to tear off the adhesion as it was so firm. Both tubes were covered with adhesions and their fimbriated extremities closed. These were removed with both ovaries, which were abnormally cystic. Now, June 25th, patient is doing well; no bad symptoms have showed themselves.

Summary.

No. of case.	Date of operation.	Age.	Condition.	Children.	Miscarriages.	Disease.	Result.
XV.	Jan. 19, 1885.	28	Married	7	4	Catarrhal s. and degenerated ovaries.	Recovered.
XVI.	Feb. 2, 1885.	35	Single	0	0	Catarrhal s. and cystic ovaries.	do.
XVII.	Feb. 28, 1885.	29	Widow	3	3	Pyo-salpinx.	do.
XVIII.	April 2, 1885.	50	Single	0	0	Catarrhal s. and atrophied ovaries.	do.
XIX.	April 6, 1885.	27	Married	2	0	Catarrhal s. and cystic ovaries.	do.
XX.	May 1, 1885.	23	Single	0	0	Pyo-salpinx ovaritis; abscess.	Died.
XXI.	May 9, 1885.	40	Married	0	0	Hypertrophied tube. Fibro-cystic ovary.	Recovered.
XXII.	May 17, 1885.	25	Single	0	0	Catarrhal s. Fimbriæ adherent.	do.
XXIII.	May 29, 1885.	21	Single	0	0	Catarrhal s. Left ovary cystic.	do.
XXIV.	June 4, 1885.	29	Married	0	4	Catarrhal s. Fimbriæ adherent. Small ovarian cyst.	do.
XXV.	June 17, 1885.	26	Married	1	1	Catarrhal s. and occluded tubes.	

According to Dr. Gordon the circulation of the blood was familiar to the Chinese physicians two thousand years ago.

FRACTURE OF THE CLAVICLE, FOLLOWED BY VICIOUS UNION—GRADUAL INFRACTION OF CALLUS—REMOVAL OF DEFORMITY.

By WILLIAM STONE TORREY, M.D.,
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The case cited below presents no peculiar features, but the treatment is apparently novel and the result certainly exceptional.

Miss A——, aged thirteen, consulted me on February 23d, with reference to a deformity of the shoulder, the result of an injury which she had sustained a month previously.

History.—On January 23d, while playing upon the ice, the patient fell, striking upon the left elbow. When the fall occurred, the forearm was flexed upon the arm, the limb extended laterally from the side, and the elbow directed behind the lateral median line of the body.

A surgeon was consulted at the time, and a diagnosis of fracture of the clavicle was made. No treatment was instituted.

On February 23d, the time at which the child was brought to me, one month after the reception of the injury, the case presented the following characteristics:

Inspection revealed a marked deformity on the affected side. The scapula and prominence of shoulder were displaced downward, forward, and inward.

The distance from sternum to acromion was apparently less on the affected side than on the sound side. When the patient assumed the erect posture, the shoulders being thrown back, the distance between the spinous processes of the vertebræ and the posterior border of the scapulæ was proportionately greater on the affected side than on the sound side.

Mensuration showed the distance from sterno-clavicular to the acromio-clavicular articulation on the affected side to be four and four-fifths inches. The distance between the same points on the sound side was five and a half inches.

Palpation over the bone showed the tumor to be a large amount of "provisional callus" which had been thrown out around the seat of fracture.

From the shape of the callus a diagnosis was made of oblique fracture of the middle third of the clavicle in a direction inward and backward, followed by vicious union. A small degree of reduction could be accomplished by placing a pad in the axilla, adducting the arm, and at the same time making counter-pressure upon the shoulder in a backward direction. An unfavorable prognosis was given, but as the friends were very anxious to have something done, I consented to institute some treatment with the object of lessening the deformity.

Treatment.—On February 28th a shellac board-splint was cut, extending from the tip of one shoulder, posteriorly, to the tip of the opposite shoulder. This was moistened and moulded to fit the bony prominences of the scapulæ and vertebræ. The splint was well padded and secured with an ordinary roller bandage (the axillary spaces being first protected by padding) by figure-of-eight turns crossing behind. On top of this plaster bandages were applied, commencing under the axilla, passing over the shoulder, under the axilla again, over the shoulder, and then across the back. When the second turn over the shoulder was made, considerable force was exerted in order to draw the shoulder backward, and the force was then retained by passing the roller across the back and securing by passing under the axilla and over the shoulder on the sound side. When the bandaging was completed and the plaster had set, the result was a firm plaster cast extending from shoulder to shoulder posteriorly, with firm plaster rings surrounding the shoulder anteriorly and inferiorly. Behind, the inferior margin of the splint was nearly on a line with the posterior-inferior angles of the scapulæ. The ring passing around the shoulder on the affected side was purposely made broader than that on the sound side, in order to obtain a fulcrum through which to make extension outward. The arm was not confined to the side, but was allowed to hang.

More complete extension backward than that already resulting from the figure-of-eight turns above described was effected by means of padding introduced between the splint and the posterior aspect of the shoulder. The least resistance being in a backward direction, the broad portion of the splint was carried away from the posterior aspect of the shoulder, and in consequence of this a counter-force was exerted on the acromio-clavicular articulation by that portion of the plaster-of-Paris ring which was anterior to it. The outer fragment was thus carried backward.

This padding was increased every few days, and padding was also introduced between the plaster-of-Paris ring inferiorly and the axilla, in order to enlarge the size of the fulcrum and thus increase the outward extension force.

The splint was removed on April 3d. Examination showed the tumor to have decreased in size. The distance on the affected side from the sterno-clavicular to the acromio-clavicular articulation was five and one-half inches, the same as on the sound side.

When the patient stood erect, the shoulders being thrown backward, the appearance of the spaces between the posterior border of the scapulæ and the spinous processes of the vertebræ were alike on both sides.

July 17th.—Examined the patient again upon this date. A large amount of the "provisional callus" has been absorbed, and the contour of the two sides, both anteriorly and posteriorly, are nearly alike.

Clinical Department.

A CASE OF COMPOUND FRACTURE OF THE RIGHT HUMERUS COMPLICATED BY DISLOCATION OF THE ELBOW-JOINT AND BY INJURY OF THE BASILIC VEIN AND MEDIAN NERVE.

Dr. E. C. Carter, Assistant Surgeon, United States Army, sends us the following: On the night of November 10, 1883, I was called to see W. C——, a lad, fifteen years of age, who had been thrown from his horse. The boy was lying in a wagon. He was pale and seemed to be in great pain. On examination I found he was suffering from a compound fracture of the right humerus about two inches from its lower articular surface. The patient had fallen from his horse while at full gallop, and the posterior surface of his arm, midway between the elbow-joint and the *line* of fracture, had struck a pointed stump. The lower fragment of the bone was dislocated forward, producing a marked protuberance in front of the elbow-joint. The lower end of the upper fragment was thrust through the skin so as to project an inch or more.

The end of this fragment was obliquely serrated, and in its passage through the soft tissues of the arm had lacerated the basilic vein and injured the median nerve. As was to be expected, the patient had lost much blood. The hemorrhage was controlled by pressure and the patient immediately etherized. Care was taken to place the light—the hour rendering a light necessary—in such a position that the wind blew from it toward the patient. As the wind was steady and strong there was little danger of the ether vapor becoming ignited. The blood and dirt in the vicinity of the wound were carefully removed, and an antiseptic wash of carbolized water was liberally used. The dislocation was easily reduced, but some difficulty was experienced in getting the broken bone into its proper position, though this was finally done without removing the extremity of the projecting fragment, as at one time appeared necessary.

Antiseptic dressings were applied, and the arm was

placed in a favorable position, as anchylosis was expected. Those in charge of the patient insisted on taking him next morning to his home, a distance of sixteen miles. During the journey, in a wagon without springs and over rough roads, the dressings became displaced, and in washing the wound, the patient's friends used *pure* carbolic acid, which produced severe and painful burns. The patient was brought back to me after the lapse of four days, and his condition was such that it was necessary to have him under close professional supervision. The wound was inflamed and full of stinking pus. The patient's temperature, taken in the axilla, was from 101 to 102° F.; his pulse-rate was 100 a minute. His tongue was foul; he had no appetite and had lost flesh. His complexion was pasty, the odor of his breath was unpleasant, and he complained of headache and weakness. All dressings were removed and the wound was again thoroughly washed out with carbolized water, and movable antiseptic dressings were applied. Citrate of iron and quinia in doses of six grains was administered three times a day, and an aperient and a generous diet were prescribed. At the end of twenty-four hours the wound looked healthy and the pus had no bad odor. The temperature and pulse-rate were normal, and at no time afterward did the temperature rise above 99° F. The case required careful attention for five weeks. At the end of that time the bone was firmly united, the superficial wound healed and the elbow-joint partially anchylosed. An anterior and a posterior splint were firmly and evenly bound along the whole length of the arm, so as to relieve the strain on the humerus, and the fore-arm forcibly extended and flexed. In one month from the time artificial extension and flexion were begun the patient could extend and flex the arm with ease. Pronation was more slowly acquired, and for some time there was anæsthesia of the palmar aspect of the index- and middle-fingers and inner half of the ring-finger. The thenar group of muscles was partially paralyzed and atrophied. I attributed this anæsthesia and paralysis to the injury of the median nerve sustained at the time of fracture.

Six months after the wound had healed I saw the boy herding cattle, and as he was guiding his horse with one hand, and whipping it with brutal ease with the other, it was apparent that he had recovered all the normal uses of his arm and fore-arm.

Progress of Medical Science.

A Case of Scrotal Gastrocele.—Dr. M. Schmidt was consulted by a patient who had for some time suffered from digestive disturbances, accompanied at times by vomiting of a black, flocculent, sour, but not fecal, smelling fluid. There was no constipation. There was a scrotal hernia, which gave a loud tympanitic note on percussion, and presented fluctuation at its lower part. A diagnosis was made of hæmatemesis, probably from ulcer or cancer, though it was thought possible that the hernia might contain a part of the stomach. The patient's condition would not permit of an operation, and he died shortly afterward. The autopsy showed that the hernial sack contained the middle two-quarters of the greatly dilated stomach. There was neither carcinoma nor ulceration of the gastric walls.—*Deutsche Medicinal-Zeitung*, June 4, 1885.

The Influence of Cimicifuga Racemosa upon Parturition.—At a recent meeting of the Chicago Gynecological Society, Dr. J. Suydam Knox read a paper in which, from his clinical observations, he drew the following conclusions: 1. Cimicifuga has a positive sedative effect upon the parturient woman, quieting reflex irritability; nausea, pruritus, and insomnia, so common in the last six weeks of pregnancy, are always rendered less distressing, and often disappear under its administration. 2. Cimicifuga has a positive antispasmodic effect upon the parturient woman. The neuralgic cramps and irregular pains of the first stage of labor are ameliorated, and often altogether abolished. In fact, during the first indiscriminative use of the drug in all cases, I had the mortification, with a few women, of terminating the labor so precipitately, and without prodromic symptoms, as to be unable to reach the bedside before the birth. 3. Cimicifuga relaxes uterine muscular fibre, and the soft parts of the parturient canal, by controlling muscular irritability, thus facilitating labor, and diminishing risks of laceration. 4. Cimicifuga increases the energy and rhythm of the pains in the second stage of labor. 5. It is my belief that cimicifuga, like ergot, maintains a better contraction of the uterus after delivery. It is my habit, however, to administer from fifteen to thirty minims of the fluid extract of ergot after the birth of the fœtal head, and I have had but few opportunities of testing this effect of the cohosh. My method of administration has been to give fifteen minims of the fluid extract of cimicifuga in compound syrup of sarsaparilla each night for four weeks before the expected confinement. One fluid ounce of the fluid extract of cimicifuga to three fluid ounces of compound syrup of sarsaparilla—dose, one teaspoonful—makes just the required quantity.

Malaria and Pregnancy.—Dr. G. C. Nijhoff, of Amsterdam, discusses, in the *Weekblad*, the question of the relation of malaria to pregnancy, adducing some observations of his own. Some years ago it seemed to be the general opinion that pregnant women were very rarely affected by malarial fevers. Thus, Griesinger (Virchow's *Handb. der spec. Path. und Ther. Infections-Krankh.*, 1856) found that, during the prevalance of a quartan fever in Prague, only two out of 8,639 pregnant and parturient women were affected. Again, Credé states (*Monatsch. für Geburtsh.*, Band xv. S. 1, 1860) that, in Leipsic, during the three years 1856–59, there was scarcely a case of tertian ague in a pregnant woman. Mendel and Ritter have also recorded the comparative immunity of pregnancy from malarial attacks, for which the latter accounts by the smaller degree of exposure to malarial influences during pregnancy. When, however, it does occur, it does not, according to both Mendel and Ritter's observations, exercise any remarkable effect on the course of the pregnancy. On the other hand, Góth, of Klausenburg, found (*Zeitsch. für Geb. und Gyn.*, Band vi. S. 17, 1881) that, during a severe epidemic of a malarial nature, 46 out of 881 pregnant women were attacked; and of these 46, in 19 the labor was premature, and in some the children were still-born, and, even when they were alive, the size and weight were abnormally low. Bompani also (*Centralbl. für Gyn.*, 1884, S. 821) is of opinion that malaria causes more premature labors than syphilis.

The discordant views of authorities, of which the above may be taken as examples, extend also to the treatment which should be adopted in the malaria of pregnancy, some, as Cazeaux, advising that quinine should be given as the surest preventive against abortion; while Petitjean (Charpentier, *Traité des Acc.*, Tome i., p. 562, 1883) and Monteverdi consider that quinine is a powerful ecbolic; the latter thinks it even more active than ergot. The writer mentions particulars of four cases, in which malaria attacked pregnant women, quinine being given. In one of these the labor came on five weeks before the calculated time; but the child was of full length, and it was uncertain whether it was really premature. In another case the labor occurred at about the right time, but immediately after a severe attack of fever, the weight of the child being 2.8 kilogrammes (about 6 lbs. 2½ ounces). The other two pregnancies terminated normally, with healthy children. With respect to the mutual effect of malaria and the process of labor, Ritter was of opinion that labor tends to arrest a malarial attack, suggesting, as an explanation of this, that the hemorrhage may perhaps account for it. Góth considered that labor is prolonged by malaria to double its normal

length, and stated that artificial assistance by forceps or extraction of the placenta was requisite more often than in cases uncomplicated in this way. The writer's own observations induce him to agree with Ritter rather than with Góth. In one of his four cases, the malarial attack did not return for twelve days after the labor; and in two more cases the patients were free for fourteen days after labor. In all these cases, the labors were normal, with very little hemorrhage. It is, of course, often difficult to diagnose malaria in the puerperal state. Ritter believed that puerperal women are peculiarly susceptible to malaria, but that they are less exposed to its influence than other people. He, however, mentioned fourteen cases, of which only three had had attacks during the pregnancy. He also thought quinine less satisfactory in its results than usual, owing to the enfeebled digestive power. The author's experience of puerperal malaria is very limited.—*British Medical Journal*, July 18, 1885.

Foreign Bodies in the Digestive Canal.—The case is related by Dr. Kohn of a melancholic patient with suicidal tendencies, who, in the hope of ending her life, swallowed three large spoons, each seven inches long, and with a bowl about an inch and a half wide. They were all passed from the rectum lying together, the convexity of one bowl fitting into the concavity of the other, and surrounded by a mass of consistent fecal matters. The passage of these bodies had excited a mild peritonitis at first, and later an attack of diarrhœa, but these disturbances speedily subsided, and no trouble was experienced after the spoons had been passed from the bowel. This case is almost unique, considering the large size of the spoons and the comparatively sharp edges of their bowls.—*Deutsche Medicinal-Zeitung*, June 4, 1885.

Is Acetonæmia the Cause of Diabetic Coma?—Contrary to the observations of Patters in 1857, whose views have been accepted by subsequent authorities, Albertoni, writing in the *Rivista di Chimica, Medica, e Farmaceutica*, endeavors to show that acetone is not the poison which causes death in diabetic patients. Indeed, when administered by the mouth it is, if pure, less poisonous, he states, than ordinary ethylic alcohol. The phenomena observed in diabetic coma are by no means always similar to those produced by acetone. He gave large doses (one hundred grammes) of glucose to rabbits, but could detect no acefone in the urine. Isopropylic acid is partly changed in the organism, acetone being formed; part of the acid is, however, passed unchanged. In man, when a dose of six cubic centimetres is given by the mouth, it is detected unchanged in the urine. Aceto-acetic ether does not produce symptoms of diabetic coma, but it does cause albuminuria and hæmoglobinuria, and is certainly eliminated in an unaltered condition. From previous researches it seems evident that aceto-acetic acid often exists in diabetic urine, its presence being detected by the red color given with perchloride of iron if the urine is not boiled or treated with an acid. This acid is well borne by the organism, and cannot be the cause of severe poisoning. The condition which governs its appearance in the urine is the reaction of the urine and that of the renal parenchyma. If the urine is acid, the aceto-acetic acid is decomposed, forming acetone; but if alkaline, neutral, or slightly acid, the aceto-acetic acid is found unchanged. This is the explanation of the discordant observations on this subject. It is probable that the formation of aceto-acetic acid explains the presence of albumen, which is sometimes observed in diabetes. Crotonic acid, the formation of which in diabetes was demonstrated by Stadelmann, cannot be considered as poisonous, two grammes producing no effect on rabbits. Crotonic aldehyde is, on the other hand, highly poisonous, even in small doses, four drops producing in a rabbit dyspnœa, and even narcosis, with the exhalation of an odor resembling crotonic aldehyde, and other phenomena which are described by Kussmaul as present in diabetic coma. Large doses caused powerful disturbance and rapid death, with epileptiform convulsions.—*Lancet.*

Maggots in External Auditory Meatus.—Dr. Vogt reports the case of a youth, aged seventeen, who came to his office June 20, 1885, and gave the following history. While plowing corn on June 17th, a "blow-fly" entered the meatus auditorius externus of the left ear, and as he was a considerable distance from home and it caused him no great inconvenience, he allowed it to remain there for over an hour before he went home and had it extracted. The next day, he thought he felt something moving in his ear, and used a warm milk injection which gave relief for a short time. The next day he used a turpentine and milk injection, but as this did not produce the desired effect and his ear became inflamed and caused him a great deal of pain, he came to me for relief. Upon examination I found the parts swollen and inflamed, and no less than a dozen full-grown maggots in the meatus and on and around the tympanum. I removed the maggots with an ear-scoop, washed the ear with a five per cent. solution of carbolized warm water, and afterward poured a small quantity of carbolized olive oil into the ear, which had the desired effect of giving permanent relief.—*Western Medical Reporter*, August, 1885.

Acute Pericarditis in the Aged.—The diagnosis of acute pericarditis is sometimes difficult even in adults, but it is yet more so in the aged. In them there are often old pulmonary lesions, chronic bronchitis and emphysema, or valvular and other cardiac affections which serve to mask the sounds proper to pericarditis. If, in addition to these, there are also signs of recent intrathoracic disease, the symptoms become still more obscure. This is shown by M. Chas. Lejard, in a recent thesis (*Revue Médicale*, June 6, 1885), who states that of the thirty-two cases of pericarditis in the aged, which form the basis of his paper, in but nine was the diagnosis made during life. The symptoms which should excite suspicion in the mind of the medical attendant are, the author says, a certain difficulty in respiration, usually increasing for several days, an elevation of temperature from 2° to 3·5°, dull, irregular, intermittent, or even tumultuous heart action, and a corresponding state of the pulse. If, during the course of a pneumonia or some other febrile disease, a sudden fall of temperature occurs, and is accompanied by the irregularity of heart-action above referred to, one ought to think of the possibility of pericarditis. The examination of the physical signs and the presence of friction-sounds would serve to establish the diagnosis, but this will be usually a diagnosis by exclusion. The treatment of pericarditis in the aged offers nothing of note. Local counter-irritant blisters or dry cups are to be used, but, above all, tonics are indicated, such as quinine, alcohol, and digitalis. These will form the basis of the treatment. If there is a very abundant serous effusion, the pericardium may be tapped, and the fluid drawn off, the advanced age of the patient affording no contra-indication to this mode of treatment.

Perforation of the Intestine caused by a Bimanual Examination.—Dr. Schwarz relates the case of a woman, forty-six years of age, who had suffered for a long time from a fibrous tumor of the womb. Shortly after a bimanual examination the patient was seized with peritonitis, and died. The writer supposed that the inflammation was caused by a rupture of the uterus and the passage into the abdominal cavity of some mercuric chloride contained in a vaginal douche. At the autopsy, however, he found that there had been adhesions of a loop of intestine to the uterus, and these adhesions had been broken and the gut ruptured by the manipulations, notwithstanding the fact that the examination had been conducted with great gentleness owing to the tenderness of the womb.—*Journal de Médecine de Paris*, June 7, 1885.

THE MEDICAL RECORD:

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GEORGE F. SHRADY, A.M., M.D., EDITOR.

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MEASURES RECOMMENDED BY THE ROYAL ITALIAN SOCIETY OF HYGIENE FOR THE PREVENTION OF CHOLERA.

IN a recent number of the *Gazetta degli Ospitali* are to be found the conclusions arrived at by the Italian Royal Society of Hygiene, as to the best means of preventing the spread of cholera. As these conclusions are based on the wide experience obtained from the prevalence of the dread scourge in Italy last year, they deserve attention. While offering little that has not already been recognized in connection with this subject, the whole is admirably epitomized, and for this reason, as well as the above, it is well worth consideration.

The Society announces:

I. The fundamental basis of public prophylaxis against cholera is a well-ordered, independent sanitary administration, composed of medical persons especially instructed in the subject, supported by the Government. To this end is recommended:

1. A reorganization of the existing service in the best possible manner.

2. That schools and laboratories be established to educate physicians in hygiene, that they be able to fill these high and responsible offices properly.

II. Relative to the etiology of cholera, Professor G. Sormani gave the Society the following facts, deduced from observations made during the epidemic of 1884:

1. That infected garments are the means in many instances of propagating cholera-germs, and that they are more to be feared than people themselves.

2. That the clothing of the feet should be the objects of special attention, as these, coming in constant contact with the surface of the soil, are more easily contaminated in infected places, and maintaining constantly a certain degree of moisture, can preserve, transport, and diffuse with great facility the cholera-germs.

3. Linen washed in infected water transmits the cholera.

4. That probably in linen and garments infected with cholera, and in contaminated water, the cholera-germ acquires a special character (sporification?) whereby it has greater tenacity and duration.

5. That animals and birds, especillay those which are filthy, seem to be able to carry the cholera-germ in their furs and feathers.

6. That surface-water and surface-soil have been proved to be a means of transmission of the cholera-germs.

7. That running water transports from the surface of the soil the germs, which multiply and diffuse themselves.

Therefore, he concludes that the local authorities should be empowered to take measures to prevent the contamination of the water-courses, for when this happens it will not be possible to check the spread of the disease; and that to provide efficacious safeguards against cholera the Government should favor with money and encouragement the study undertaken in Italy for a more exact knowledge of the facts which go to establish a basis of scientific prophylaxis.

III. The Society considered the means of preventing the invasion of cholera. These should consist of:

1. Strict quarantine on the frontiers adjacent to the infected countries.

2. Sanitary inspection of the quarantined. Disinfection of garments with moist heat at 100° C. Destruction of the same if polluted with infection.

3. That while free passage of new merchandise destined for commerce be permitted, all free passage of every kind of effects, garments, and objects used should be forbidden.

4. Whenever return of travellers is possible it should be done. Emigrants (operatives, peasants, and poor people) coming from infected districts should be returned under the care of the Government, and preferably by water rather than by land.

IV. The Society recommend that the quarantine laws relative to quarantine of harbors and pest-houses be revised to correspond more with the altered conditions of travel. That the land and sea quarantine be proportioned to each other.

V. Relative to internal quarantine it is suggested that a sanitary cordon under the direction of the Minister of the Interior be instituted; that the circulation of people from infected districts be prevented; and that those who come should be quarantined and disinfected. The fumigation of people and of effects ordinarily performed, at the railway stations or elsewhere, ought to be prohibited as useless and also dangerous.

VI. For local prophylaxis the Society advise:

1. To combat as far as possible the first case of cholera or suspected case. That such be taken to a suitable hospital; that suitable fumigation follow, and every precaution be used that the infection do not spread.

2. To institute common ovens for practising effectual disinfection. To take great care to separate infected clothing from that going to the general laundry, and to banish useless fumigation of people and things.

3. To hinder everything tending to increase the misery and panic of the people; to favor the establishment of a public kitchen and inspection of all alimentary substances and of drinking-water.

4. Recommending, above all, the care of the hygiene of the house, of the soil, and of the subsoil of inhabited places.

VII. Lastly, the Society maintains that in the quarantine of persons from infected districts ten days afford ample opportunity for disinfection.

THE INTERNATIONAL MEDICAL CONGRESS.

THE *Journal of the American Medical Association*, which has so steadily maintained a character for dignity and dulness, has recently lost its first attribute at least, without perhaps undergoing much change as regards the second. Its endeavors to prop up the present managers of the International Congress have led it into a curious position. It is no longer the organ of the profession, or even of the Association, but is rather a strident defender of the clique who are bent on having their own way. Despite the almost universal condemnation of the policy developed at New Orleans and Chicago, the *Journal* continues to defend it. In doing so, it has not had the courage of other journals, which it accuses of being "organs," but has systematically repressed all adverse critical comments even from disinterested European brethren. It has sneered at the eminent gentlemen who have withdrawn from the Association, and has characterized them as thoughtless and foolish malcontents. Although resignations have now been going on steadily for over two months, it still chooses to regard the action as "hasty."

With all this, however, we are each week informed, that if the withdrawing members will hurry up and return to the fold, it may not yet be too late for them to be forgiven! The *Journal* is in much the position of a man on a raft, who threatens the passengers of a staunch ship with all the dangers of the sea if they do not soon come down and help him navigate.

Last of all, the *Journal*, to help itself along, has been guilty of misstatements, which, however, we can easily believe were accidental or typographical. We quoted last week from it the announcement that Dr. John H. Packard had withdrawn his resignation. We have the authority of the *Medical News* that this is not true.

Our Chicago contemporary, in discussing the question, has in every instance evaded the real issue, viz., that there should be no politics in a scientific convention. The introduction of this issue it cannot excuse, and wisely has not attempted it.

From its last announcement, we infer that no serious attempt at compromise is to be made. The present managers will, it is true, change the rules so that any regular physician can be a member of the Congress. But it is simply an insult to intelligence and self-respect to assume, as is done, that this is any concession. Gentlemen of New Code affiliations can contribute in money and work, but cannot share the honors!

There is a demand from the whole American profession, from that of England, Germany, and the other countries of Europe, that the Code issue be entirely left out. Will not the committee, which is to meet in this city on September 3d, respond to this demand? It would not be very difficult, and the success of the Congress would then be assured.

INDIAN SPRUE.

NATIVES of temperate regions resident in tropical countries are subject to a variety of diseases, affecting chiefly the chylopoëtic system, which are known to us only from text-books, or as they are occasionally seen in the persons of those who have contracted them during a sojourn in hot climates. Among the most interesting of these disorders, and one of which we have seldom seen a satisfactory description, is that known as Indian sprue, or aphthæ tropicæ. One of the best accounts of this disease which has yet appeared, and one upon which we have drawn largely in the following description, was published some years ago by Dr. C. L. Van der Burg,[1] and translated for the Reports of the Imperial Maritime Customs of China, No. 2, 1884.

Indian sprue is an endemic disease occurring in the East and West Indies and other hot countries. The affection is chronic, non-contagious, never existing as an epidemic in the true sense of the word, although there may be a large number of sufferers in a single locality, and does not occur as a sequela of any other disease, but is protopathic and *sui generis*. It is not commonly fatal, but its course is slow and exceedingly protracted, and even after recovery there exists a marked tendency to relapses if the patient does not return to a temperate climate. The cause of the disease has never been conclusively determined, but it would appear to reside in suppression of the action of the skin and expulsion of the blood from the superficial capillaries, leading to a condition of abdominal plethora and modification of bile secretion. Women are more commonly attacked than men.

Indian sprue may, for convenience of description, be divided into three stages, though it does not always run the entire course, and the different periods are very variable as regards their duration. The first stage is that of gastro-intestinal catarrh. There is at first an indefinable feeling of malaise, which is soon followed by symptoms of digestive disturbance. There is a feeling of epigastric fulness, without distinct pain, which is increased after eating, but it is at the same time almost impossible to refrain from taking food in quantity, owing to the ravenous appetite which the patients experience. There is abdominal distention from the accumulation of gas, relief from which is often obtained by explosive eructations, in which not only gas is expelled, but also a sour, acrid fluid. Vomiting is an occasional symptom, and is usually periodic, occurring about noon. The tongue at this time may be clean or slightly furred, but soon little red specks appear along the edges and at the tip, which are seen on close examination to be injected papillæ. The action of the bowels now becomes irregular, there being perhaps a natural stool one day, and the following day, or may be even after a few hours, a watery, light-yellow passage may occur. The patients do not present a cachectic appearance, though there is usually a yellow tinge to the conjunctivæ. There is no fever.

In the second stage, all the symptoms of gastro-intestinal disturbance become more pronounced. Abdominal distention is greater, vomiting is more common, pain in the stomach is complained of, and there are frequent intestinal discharges of pultaceous, clay-colored matters. The liver is diminished in size to such an extent that even during full inspiration its lower border can with difficulty be felt behind the ribs. The appearance of the tongue at this time is characteristic. The red specks increase in number and size, covering finally the entire organ, while the surface becomes dry, glossy, and smooth,

[1] Indische Spruw (Aphthæ Tropicæ). Batavia: Ernst & Co. 1880.

seeming to be wholly denuded of its epithelium, and is very sensitive. The redness is very marked, and Dr. Van der Burg regards its depth of color as a sure indication of the progress of the disease. The mucous membrane lining the mouth and pharynx is colored in a similar way. The under surface of the tongue presents a like appearance, but has a somewhat bluish tinge. The urinary secretion is diminished in quantity, and is albuminous, but no casts are present. The skin is dry. There is great muscular weakness and profound mental depression, approaching almost to melancholia. It is not very often that the disease passes beyond this stage, and when it does so it is usually because of persistent disregard of dietetic rules. Recovery frequently occurs. The third stage is one of general wasting; vomiting is very frequent and follows immediately upon the ingestion of food, the diarrhœa becomes watery, the patient becomes feverish, and death occurs from exhaustion. The mucous membrane covering the tongue and other parts of the mouth becomes fiery red, the gums retract, and large clefts and fissures appear on the tongue.

Such are, in brief, the symptoms of this distressing disease, but they are not always so marked or so regular in their appearance, and variations from the typical description are the rule rather than the exception. The pathognomonic sign, however, is the appearance of red specks, not vesicles, upon the tongue coincidently with the symptoms of gastro-intestinal catarrh.

The treatment of Indian sprue is mainly dietetic, although the value of certain drugs is not to be denied. The food should be chiefly farinaceous in character, consisting of rice, corn-meal, arrow-root, and the like. Various kinds of prepared foods for infants and invalids, of which so many have been put on the market of late years, here find a field of eminent utility. Most succulent vegetables, cabbage, onions, peas, and similar articles, are to be avoided. Beef is injurious, but most of the varieties of white meats, poultry, veal, and pork, are well borne. A mode of treatment of comparatively recent origin, known as the "fruit cure," is one that promises to find favor with patients and physicians alike, as it has, in many cases, been productive of excellent results. Patients subjected to this "cure" live almost exclusively on fruits of various kinds, chiefly those grown in temperate climates, such as peaches, pears, apricots, and apples. Necessarily canned fruits must be depended upon in great measure, and a preference is expressed for those of American canning, the European preparations containing too much sugar. Along with these, strange to say, cucumbers and other articles containing a large proportion of water are given. It is sometimes difficult to induce patients to undertake this method of treatment, which is so opposed to their ideas of a diet suitable in diarrhœa, but the results which have been obtained from it are said to have been most gratifying. Among the drugs most in favor are the mineral acids, nitrate of silver, and mucilaginous preparations. Opium and calomel are injurious.

It is not often that we meet with this strange disease in temperate climates, yet it is occasionally seen in the persons of those who have returned after a long residence in the tropics, and as descriptions of it are so few, so inaccessible to the majority of physicians, and usually, also, so imperfect, and ever misleading, the account here given may prove to be of assistance to some perplexed practitioner in whose way chance has thrown a sufferer from Indian sprue.

"WHAT TO DO IN CASES OF POISONING."[1]

BEFORE us is a diminutive volume bearing this title. The knowledge of its contents might prove more valuable to its possessor than that of many a quarto.

What graduate is there who does not feel, after he leaves college, hanging over him like the sword of Damocles suspended by a hair, the dread possibility of a summons to a case of poisoning? His mind is full of scraps of information with which he has passed his examinations and obtained his degree. Made more prominent because of the questions asked with reference to the subject, toxicology and antidotes have assumed an awe-inspiring importance. The dread of cases of poisoning ever remains with him; but some way the knowledge which carried him to the triumph of obtaining his degree oozes away with time, leaving only a vague notion of just when and why the plaster from walls and ceilings should be scraped to administer to the poisoned victim; when the gallons of coffee should be given; when the patient should be flagellated and walked about, and when on no account he should be raised from a recumbent position; when the whites of eggs should be called for; when the vinegar cruet should play an important part as furnisher of an antidote—all this exceedingly useful and necessary knowledge becomes, in many a medical mind, perfectly clear on every-day topics, a hopeless jumble.

Says the writer of the little volume: "I can imagine nothing more painful than to be called to a case of poisoning, and not to know what to do." Many a doctor has a sneaking notion of how painful this would be, and yet he remains unprepared for such an emergency; putting off refreshing his rusty knowledge, allowing himself to go unsupplied with the most common antidotes; procrastinating like a man who knows he ought to make his will, but does not.

The doctor cannot, like a cook, have his recipe-book in his hand; he must carry it all in his head. His ideas must be ready, like fire-engines, for full service when called upon.

To avoid the complexity of the subject and the perplexity of diagnosis, a search has been made for that philosopher's stone, a "multiple antidote;" that is, a preparation which will neutralize the toxic action of all or most all the active poisons. Two such are given as very nearly answering the purpose.

One of these is the iodide of starch, which is efficacious in poisoning by sulphuretted hydrogen, the alkalies, the alkaline sulphides, and especially the alkaloids, with which iodine forms an insoluble compound. The other is given as follows: Saturated solution of sulphate of iron, 100 parts; water, 800 parts; calcined magnesia, 88 parts; purified animal charcoal, 40 parts.

The iron solution should be kept separately, and the magnesia and charcoal mixed in a bottle, and the whole well shaken together. It may be administered *ad libitum*, a wineglass or more at a time. It is said to

[1] By William Murrell, M.D., F.R.P.C. Fourth Edition. Published by H. K Lewis. London: 1884.]

render preparations of zinc, arsenic, and digitalis absolutely inert, and to partly neutralize the action of mercury, morphia, and strychnine. It has, however, no action on the alkaloids, and none on phosphorus, antimony, or hydrocyanic acid.

Better by far than "the multiple antidote" is "the antidote-bag." We commend it to our readers. If you would purchase immunity from the dread of encountering a case of poisoning, possess "the antidote-bag;" then, if the summons comes at midnight, or any other hour, you will go forth without trepidation. You will have in hand everything you need—antidotes, emetics, stimulants, hypodermic syringe; not to mention the little book, your fountain of wisdom.

"Every doctor should have a stomach-pump," also says our mentor, or at least be sure that he knows how to rig up an apparatus which will do the same work.

For a young physician there links an added terror to the summons to a case of poisoning, the dread of having to encounter the legal proceedings which will surely follow a fatal issue. Our little book gives sage advice in such an event, and adds this, which is sufficient to bolster up the courage of any faltering medical witness: "If you have read up on the subject, you should be more than a match for any barrister."

You have your book of reference at hand, your "antidote-bag" or "multiple antidote," a stomach-pump; you have become primed to give legal evidence, as if accustomed to it all your life. One thing still remains. "Every medical man should get up the subject of *ptomaines*," remarks our author with emphasis. These closely resemble vegetable alkaloids; but they are cadaveric substances, generated during the decay of the dead body, and are supposed to be alkaloids. It must be known that they exist, and how they react.

It should ever be remembered that, as Dr. Murrell tersely and correctly puts it, "all rational treatment of cases of poisoning is founded on a correct appreciation of the physiological action of drugs." It is the same with reference to diagnosis. "There is no royal road," he says; "the only way to arrive at a correct conclusion is to utilize your knowledge of the physiological action of drugs." Then you will always know "what to do in cases of poisoning."

JACCOUD'S METHODS OF TREATING PHTHISIS.

EVERY modern writer upon phthisis seems to feel it a duty to lay stress upon the possibility, and even frequency, of cure or arrest of phthisis. There is a great deal of hopeful prognosis also floating through medical periodicals and monographs. Yet we are still unable to find any author who is willing to give in exact terms the percentage of cures which he has had.

The writer is willing to admit that among some five hundred cases which have come under his observation, he can record only one positive and one relative cure in the first stage, and two relative cures or arrests in the second stage. Still we are being constantly assured that phthisis is curable in all stages, and, perhaps, it is quite as well that such a hopeful feeling should be the prevalent one.

One of the most emphatic supporters of the doctrine of the curability of phthisis is Professor Jaccoud, whose work[1] has just been translated by Dr. Montague Lubbock.

Professor Jaccoud is a unicist, believing all forms of phthisis to be tubercular. Clinically, however, he makes the usual distinctions of pneumonic or caseous phthisis, chronic miliary phthisis, or the ordinary form, and acute miliary tuberculosis. Leaving out the last-named type, the forms of phthisis which are most curable are, first, the pneumonic, and next the chronic miliary phthisis. The different types of chronic phthisis may be arranged, as regards possibility of cure, as follows: First of all, arthritic phthisis, or phthisis in rheumatic persons; next, the primary, then the scrofulous, the innate, the hereditary, and finally the diabetic form, which is always incurable.

M. Jaccoud announces a certain novelty in his conclusions and views on treatment. We turn, therefore, with special interest to this latter subject, which he, aside from his chapters on prophylaxis, divides into four heads: the hygienic, medicinal, climatic, and the treatment with baths and mineral waters. But little stress is laid upon anything but the climatic and medicinal treatment, these including, of course, ordinary hygienic measures.

M. Jaccoud has studied personally and with care the subject of climates. He makes but two classes of climates, and his views are simple, clear, and, so far as they go, correct. Climates are either high and cold, or low with a steady and mild temperature. High climates have a positive therapeutic effect, low climates are simply negative in value in that they only enable the system to be put in good general condition.

The subject of the medicinal, hygienic, and dietetic treatment is naturally most interesting, since, after all, in the vast majority of cases the victims of phthisis must depend upon these.

In the initial period of phthisis, Jaccoud recommends as a general course of treatment milk or kumyss twice daily, cod-liver oil or glycerine, and arsenical granules. Three ounces of oil daily is the least amount that will do any good, according to Jaccoud. This is certainly an important statement, since all over the United States cod-liver oil is given in doses of only two to four drachms. Arsenic should be given in the form of granules of gr. $\frac{1}{64}$. Of these two are taken daily, and the number increased up to eight or ten. Glycerine may be substituted for oil, in doses of three to four tablespoonfuls daily. A drop of essence of mint and two drachms of rum or brandy may be added to it.

So much for general medicinal treatment; but our author attaches very great importance also to local indications. Counter-irritation over the affected part is always necessary, and the specially important thing is that it be kept up continuously. Jaccoud prefers to use Vienna paste. When cough is accompanied with habitual expectoration, pure creasote, in small doses, with the oil or glycerine, is recommended, and is believed to act upon the catarrhal as well as the pulmonary lesions.

Pyrexia is perhaps the most important single symptom

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[1] The Treatment and Curability of Pulmonary Phthisis, by S. Jaccoud, Professor of Medical Pathology in the University of Paris. Translated and edited by Montague Lubbock, M.D. (London and Paris), M.R.C.P. (Eng.). Pp. 407. New York: D. Appleton & Co. 1885.

to be opposed. According to Jaccoud this pyrexia is, generally speaking, either inflammatory or septic in origin. The symptomatic or inflammatory fever is usually best treated with quinine, about fifteen to twenty grains being given daily. In the absorption or septic, or as it is ordinarily termed, the "hectic" fever of phthisis, quinine is believed to be of no use, and in its place salicylic acid is very strongly recommended. Thirty grains are given on the first day, then twenty or fifteen on the second or third days.

We have not space to go further in description of Jaccoud's methods. In fact we do not find in them anything radically new. His judgment upon the value of inhalations and compressed air is on the whole favorable, and in accordance with present views. With regard to pneumonic phthisis, a strong point is made as to the necessity of early, continuous, and vigorous stimulation. Throughout the course of treatment the use of alcoholic liquors is advised.

News of the Week.

NAVY NEWS.—Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service for the week ending August 22, 1885. Surgeon P. H. Bailhache, granted thirty days' leave of absence, August 15, 1885, Chairman of Board to examine Candidates for appointment as Cadet in the Revenue Marine Service, August 19, 1885. Passed Assistant Surgeon Fairfax Irwin, Recorder of Board, August 19, 1885.

THE THIRD ANNUAL MEETING OF THE AMERICAN RHINOLOGICAL ASSOCIATION will be held at Lexington, Ky., October 6, 1885. Papers and discussion will be devoted exclusively to the diseases of the nasal passages and their sequences. Officers for 1885: P. W. Logan, M.D., Knoxville, Tenn., President; A. DeVilbiss, M.D., Toledo, Ohio, First Vice-President; J. A. Stucky, M.D., Lexington, Ky., Second Vice-President; C. A. Sims, M.D., St. Joseph, Mo., Recording Secretary; N. R. Gordon, M.D., Springfield, Ill., Librarian. J. G. Carpenter, M.D., Stanford, Ky.; H. Jerard, M.D., East Lynne, Mo.; H. Christopher, M.D., St. Joseph, Mo., and E. F. Henderson, M.D., Los Angelos, Cal., Council. Information concerning the full programme, membership, papers, attendance, etc., may be learned from any of the above officers of the Association.

AN EDITOR'S LOSS.—A fire in the office of the editor of the *New England Medical Monthly* destroyed his exchanges, a large quantity of matter ready for the press, books and manuscripts for the Medical History of Connecticut. We tender our condolences.

A MISINTERPRETATION.—Dr. Garnett, of Washington, publishes in a contemporary journal the untruthful statement that THE MEDICAL RECORD is an ardent advocate of consulting with homœopaths. This shows how oversight sometimes leads the most polite into discourtesy. We have never advocated consulting with homœopaths, but only for the freedom and right of the individual to do so in certain cases.

THE Professorship of Ophthalmic Surgery in the University of Gratz has been conferred on Dr. Blodig.

PROGRESS OF THE CHOLERA IN SPAIN.—According to information received by the National Board of Health, the following figures represent the diffusion and mortality of cholera in Spain for the period from July 4th to 17th, inclusive:

PROVINCE.	Cases.	Deaths.	Per cent. of mortality.
Albacete	35	13	37.1
Alicante	2,083	856	41.1
Castellon	1,367	639	46.7
Cuenca	467	205	43.9
Jaen	22	8	36.3
Madrid	1,076	602	55.9
Murcia	2,879	1,128	39.2
Tarragona	369	184	47.8
Teruel	81	33	40.7
Toledo	608	267	43.9
Valencia	10,220	4,979	48.7
Zaragoza	1,690	585	34.6
Total	20,897	9,499	....
Previously reported	28,044	12,347	....
Total reported.	48,941	21,846	....

The *Bulletin* also says that it is probable the epidemic has prevailed much more extensively than is indicated by the above figures, as the *Medical News*, published in Madrid, states in its issue of July 30th, that in one place more than one thousand certificates of death were found that had not been reported to the registrar. The same paper also states that in the vicinity of Valencia corpses are allowed to remain in some of the houses for more than forty hours, that the clothing and bedding of those who have died of cholera, which should be burned, are sometimes not taken from the houses for eight days, and sometimes not at all, and that the public vehicles of Alfafar, etc., which have their stand in the Plaza of San Augustine, carry corpses to the cemetery at a charge of forty-six reales, and immediately upon removing the bodies, load up with passengers for the return trip to the villages. The editor very properly urges the people to unite for protection against the scourge by the observance of sanitary precautions.

PLEASING TO AMERICANS.—In one of his letters to the *Philadelphia Medical Times* Dr. J. Milner Fothergill thus pays his compliments to American writers: "New books are certainly coming out here, but in sparse quantity compared to the legion springing up on your side of the water, many of which find their way over here, and are in repute. Not only are the products of the United States in drugs and chemicals taking the lead of home productions, but in literature they are threatening the old supremacy of England, or, rather, the United Kingdom; for Edinburgh always has held a good position in medicine, and when a Dublin man girds up his loins for a book, it is usually for a good one."

UNIVERSITY OF VIENNA.—Drs. Hofmokl, Ultzmann, and Anton Wölfler have been appointed Extraordinary Professors of Surgery, and Dr. Mauthner Extraordinary Professor of Medical Chemistry.

DR. A. WYNN WILLIAMS (London) has been elected a Corresponding Fellow of the Boston Gynecological Society.

THE Academy of Sciences in Holland has awarded the Leeuwenhoek medal to Professor Ferdinand Cohn, of Breslau.

MEDICINE IN RUSSIA.—Dr. J. Lazarewitch, Professor of Midwifery and Gynecology in the University of Kharkoff, has been raised to the dignity of Emeritus Professor. Dr. Kusmin, formerly assistant to Professor Sklifasovsky, both in St. Petersburg and Moscow, has been appointed professor of the Hospital Clinic in the latter city. He has acted as editor of the "Annals of the Surgical Society of Moscow."

THE Government of India is making arrangements to have further investigations of a varied character, as to the essential cause of cholera, continuously conducted in India, under the direction of Dr. Douglas Cunningham. As the commission sent out under the direction of Professor Roy, by the Association for the Advancement of Medicine by Research, is now at work in the cholera-infected districts of Spain, the contributions made by England to the question, though somewhat tardy in their arrival, are likely to be important.

THE ACADEMY OF MEDICINE OF LIMA.—A report has been presented to the Free Academy of Medicine of Lima, Peru, by Dr. Villar, from the commission which had been appointed to investigate the cases of yellow fever in Callao.

A ROYAL MEDICAL PRACTITIONER.—Prince Ludwig Ferdinand of Bavaria, son-in-law of Queen Isabella of Spain, who obtained the degree of Doctor of Medicine at Munich last year, is now practising at Nymphenburg, Bavaria.

REMOVED FOR "OFFENSIVE PARTISANSHIP."—Dr. E. S. Elder, Secretary of the Indiana State Board of Health, has been removed for "offensive partisanship."—*Fort Wayne Journal of Medical Sciences.*

COCAINE is already being adulterated. Professor Kastenbine, reports the *Medical Herald*, analyzed a preparation sold by a Detroit chemist, and found it to contain two-thirds of boric acid.

AMERICAN DERMATOLOGICAL ASSOCIATION. — The Ninth Annual Meeting of the American Dermatological Association was held at the Indian Harbor Hotel, Greenwich, Conn., on August 26th, 27th, and 28th. Dr. W. A. Hardaway, of St. Louis, is President of the Association; Dr. W. T. Alexander, of New York, is Secretary.

FURTHER WITHDRAWALS FROM THE ORGANIZATION OF THE INTERNATIONAL MEDICAL CONGRESS.—Five of the officers of the Congress appointed from Chicago have withdrawn; also three gentlemen of Charleston, S. C.; two from the army, and several others living in different parts of the country. German and French medical journals echo the opinions expressed by the English medical journals, lamenting the introduction of ethical and local issues. Sir James Paget has written a letter to Dr. Hays, of Philadelphia, and Sir William MacCormac a letter to the *Boston Medical and Surgical Journal.* Both gentlemen intimate regret and surprise at the course taken by the American Medical Association. The invitation to meet in this country tendered in Copenhagen was believed, they say, to have been tendered in the name of the American profession. If it had been thought that a political issue would have been introduced, the invitation would not have been accepted.

THE FEVERS OF MINNESOTA.—In a paper on "Types and Phases of Fevers in Minnesota," read before the Hennepin County Medical Society, August 3, 1885, by Dr. Slagle, of Minneapolis, it was concluded that in Minnesota there are typhoid and typho-malarial fevers, but no types or phases of fevers peculiar to the State.

THE FOURTH ANNUAL ANNOUNCEMENT OF THE NEW YORK POST-GRADUATE MEDICAL SCHOOL is at hand. From it we learn that there were during the past year one hundred and twenty-nine matriculates. The school now has a hospital, which has already been substantially endowed, its own medical society, and its own journal. Sixty-three operations were performed in the hospital during the past season.

SANITARY ENGINEERING; A NEW FIELD FOR YOUNG MEN.—The School of Mines of Columbia College has recently established a course of study for the education of sanitary engineers. The course lasts four years, and is a comprehensive one, though apparently deficient in physiology and pathology.

EXIT THE BACILLUS OF SYPHILIS.—M. Cornil reports to the Académie de Médecine the results of the investigations by MM. Alvarés and Tavel upon the bacillus of syphilis (Lustgarten). They find a bacillus resembling Lustgarten's in normal secretions, and they incline to the opinion that it is identical with the so-called bacillus of syphilis.

DR. OLIVER WENDELL HOLMES.—We trust that Dr. Holmes will not feel sensitive on being reminded that this is his seventy-sixth birthday.

JOURNALISTIC CHANGE.—The *Medical Chronicle* has ceased its distinctive existence and combined with the *Philadelphia Medical Times.*

DANIEL'S MEDICAL JOURNAL is the title of a new journal just started by Dr. F. E. Daniel, late editor of the *Texas Courier-Record.* The *Journal* comes to us ablaze externally and internally. Dr. Daniel has a chivalrous mind and journalistic instincts. We wish him all success.

THE JEWISH RACE.—Disciples of Darwin have long wondered why Jews, who have been circumcised for thousands of years, are still born with a normal prepuce. M. Blanchard now announces to the Société de Biologie that many male Jewish infants are born without a prepuce. M. Landouzy affirms that flat-foot is very common among the Jews; M. Blocq affirms that scrofula, phthisis, hysteria, and severe neuroses are more than ordinarily common among the Jews, and that the race is in its decadence.

THE NEW BUILDING OF THE COLLEGE OF PHYSICIANS AND SURGEONS is to be located immediately opposite Roosevelt Hospital. Work has already begun upon it. The building, it is said, will be large and well equipped, but plain.

THE MISSISSIPPI VALLEY MEDICAL SOCIETY will meet at Evansville, Ind., September 8th, 9th, and 10th next. The railroads will return members at one-third fare. Hotel rates from $1.50 to $2.00 per day. This Society was formerly the tri-State Medical Society, comprising the States of Ohio, Indiana, and Kentucky.

Dr. Henry B. Sands has resigned his professorship on the Practice of Surgery at the College of Physicians and Surgeons. He will, it is said, still continue his clinical work in connection with the curriculum of the institution.

Dr. Samuel A. Green.—The Governor of Massachusetts has appointed Dr. Samuel A. Green, formerly City Physician and ex-Mayor of Boston, to the position on the State Board of Health, Lunacy, and Charity, formerly held by Dr. H. P. Walcott.

Resignation of Dr. Noyes from the Organization of the International Medical Congress.—Dr. Henry D. Noyes, of this city, has sent the following letter to the Permanent Secretary of the Committee on Organization of the International Medical Congress. "I beg to acknowledge your favor of the 19th ult., informing me of my appointment as First Vice-President of the Ophthalmological Section of the Ninth International Medical Congress by the committee which met at Chicago. This position I cannot accept, because, by so doing, I should assent to the action of the American Medical Association, which has thrust into the International Medical Congress a controverted subject with which the Congress has no concern, and has determined to exclude from all official positions the medical men whose convictions in this regard it disapproves of. I refuse to admit that the composition of the International Medical Congress should be in any way determined by the controverted points of the Code of Ethics of the American Medical Association. I also refuse to join in treating with neglect or disrespect honorable and eminent physicians, who do not accept all the restrictions of that Code about medical consultations. The right of the American Medical Association to take this course, can, I think, be successfully challenged; but for my own decision it is enough that I cannot concur with it, and that I feel sure that its pursuance will prove most hurtful to the Congress, in whose welfare, as you know, I have taken a deep and active interest. For the courtesy of the committee in tendering me this honor, I beg you to express my thanks."

The Drainage of Bellevue Hospital.—It is reported that twenty persons, employed as nurses and helpers in Bellevue Hospital, are ill from the effects of sewer-gas which has been permitted to enter some of the wards while plumbers have been placing new drain-pipes in the building. In the offices of the Health Department it was said that no reports of trouble from sewer-gas in the hospital had been received through official channels. The work of placing new drain-pipes in the hospital was begun on the recommendation of the Board of Health, and the plans of drainage are such as meet the approval of the sanitary officers.

The Verdict of the Court-Martial in the Case of ex-Surgeon-General Wales has, says a Washington correspondent of the Philadelphia *Medical Times*, caused somewhat of a sensation. It will be remembered that Dr. Wales was tried by court-martial and found guilty of inefficiency and neglect of duty, because he failed to discover the rascality of several of his clerks, by which the Government was swindled out of a large amount of money, said to be over a hundred thousand dollars. The court failed to connect Dr. Wales with any of the frauds, but convicted him on a technicality, and imposed what is considered here a very severe penalty, out of all proportion to the offence. The high professional character of the late Surgeon-General, and his successful labors for the advancement of the medical staff of the navy, did not avail him; in fact, they seemed to render his offence the greater in the eyes of the court, which apparently held the opinion that the duties of the Surgeon-General were simply to watch his subordinates and prevent their stealing. It seems by the confession of the principal criminal, the late chief clerk of the Bureau of Medicine and Surgery, that the frauds had gone on undetected for years under Dr. Wales' predecessors; but the court refused to go into the inquiry farther than concerned the latter's administration. To outsiders it looks very much as if Dr. Wales were the victim of a systematic persecution, of which the late Secretary of the Navy was the chief promoter. It is well known here that there was a violent personal antipathy between the two men, which may have been partly political, but is believed to have largely arisen from social antagonisms. The penalty imposed by the court is suspension from rank and duty for a period of five years. It is said that Dr. Wales' counsel will not rest satisfied with this verdict, but will appeal the case to the Supreme Court.

The Small-pox in Canada. — The mortality from small-pox in Montreal is on the increase. Most of the victims are French Canadian Catholics, who do not order their lives in obedience to sanitary rules, and are opposed to vaccination. Small-pox has for years been more or less prevalent in Montreal. In the five years ending with 1880 it caused the deaths of 2,549 persons in that city, and of these 2,146 were French Canadians. Of the fifty-six who died last week, fifty-two were French Canadians. The ignorance of these people seems to be on a par with the incompetency of the city authorities. Several cases are reported from Toronto and Quebec; but the authorities of the latter city deny the truth of the report. The City Council of Quebec are attempting to enforce the compulsory vaccination ordinance.

The Cholera in France.—Early in the week the cholera in Marseilles was rapidly increasing. Within forty-eight hours two hundred new cases were admitted to the Pharo Hospital, and during the same period two hundred deaths from the disease were reported within the city limits, besides fifty in the southern suburbs. At Toulon the disease was likewise spreading. The French squadron at Hyères has reported four deaths from cholera. Later reports denote some falling off in the mortality and morbidity of the disease.

Dr. Hire's Recommendation a Forgery.—It is reported that Dr. William H. Hire was appointed examining surgeon in the Pension Office at New Orleans on a recommendation purporting to be from Mr. St. Martin, of Louisiana, which turned out to be a forgery. Dr. Hire is under indictment for violation of Section 5,438, Revised Statutes of the United States, which refers to the collection or presentation of fraudulent claims against the Government.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, June 24, 1885.

JOHN A. WYETH, M.D., PRESIDENT, IN THE CHAIR.

DIFFUSE LIPOMA—LOCAL ELEPHANTIASIS.

DR. A. JACOBI presented a baby, eight months old, the mother sixteen years of age. The anomaly for which he presented it was a moderate amount of swelling on the outer aspect of the lower half of the left leg, with the history that the swelling was noticed at birth, at which time it was smaller and softer than at present. Dr. Jacobi first saw the child two weeks ago, and the swelling had increased in size slightly since that time; it had not enlarged in circumference, but was raised a little more above the level of the surrounding tissue. The enlargement begins outside of the tendo-Achillis, about four centimetres above the malleolus externus, extending around the leg to about one-third of its circumference; the longitudinal diameter is about four and a half or five centimetres. It is not at all lobulated. Dr. Jacobi presented the case for diagnosis. There were only two things which, in his opinion, it could possibly be; first, diffuse lipoma; second, local elephantiasis. In the March number of *The Archives of Pediatrics*, last year, he published an article on congenital lipoma, and at that time collected a large number of reported cases, some complicated and others uncomplicated. One was complicated with spina bifida; one was very large, and spread over a very large portion of the body, quite diffuse, not capsulated at all as are lipomata in the adult. In a few cases the swellings were quite local. In one or two instances the tumors were removed without difficulty, but in others the cases terminated in death after attempt at removal. The diffused lipomata are characterized by not being capsulated, by beginning in the normal fatty tissue and growing locally, sometimes over a very small surface.

Another possibility in the case was that it was a local elephantiasis. He had seen congenital elephantiasis of such local character and in exactly the same neighborhood. He had seen it upon the dorsum pedis, and also upon the neck in the form of one or more heavy folds of skin; upon the foot in masses extending from one to one and a half inch, the transverse length being more than the vertical. He had seen one case in which the disease appeared in the lumbo-sacral region. One of the characteristic conditions which would aid in making a differential diagnosis was the fact that the skin itself is found hypertrophied, and it seemed to him that in the case presented the skin was hypertrophied. It was not movable over the fatty substance. If this be so, the case might be claimed as one of localized elephantiasis.

THE PRESIDENT asked if it might not be a sarcomatous growth.

DR. JACOBI said it was not malignant, like sarcoma, because it was not sufficiently circumscribed, and it was probable that it did not extend deeper than the subcutaneous tissues.

THE PRESIDENT said he had seen one case of congenital sarcoma which occurred upon the chin of a little boy, and remained as a movable thickening of the skin for a year and a half before it began to grow, and then it grew very rapidly until he died, at the age of two and a half years, with an immense sarcomatous tumor.

DR. JACOBI said that in his case the tumor was already of considerable size, and if it was malignant he thought it would have already assumed the shape which would have been expected if it had been sarcoma. The child was a very fat one, and that might perhaps arouse the suspicion of the swelling being originally lipomatous in character; at the same time many such babies were seen without like accumulations of fat.

DR. RIPLEY thought it unnecessary to hazard an opinion with reference to diagnosis when it was so easy to reach one by simply making an incision, removing a small portion of the growth, and examining it microscopically. Certainly if it was lipomatous the nature of the swelling could be thus readily ascertained, and no harm would be done by the procedure. So, also, if it proved to be a growth of another character, an operation for its removal could be completed.

DR. JACOBI said he thought he should remove the growth, and would probably have an opportunity to present it to the Society at some future meeting.

DR. W. GILL WYLIE presented a series of specimens (see page 227), illustrating eleven additional cases in which he had performed Tait's

OPERATION FOR SALPINGITIS.

DR. AMIDON asked Dr. Wylie in how many of the twenty-four cases in which he had operated the patients were distinctly hysterical.

DR. WYLIE said that probably one quarter or one-third might be classed as hysterical. He was inclined to the opinion that those patients were hysterical in whom the ovaries were in a condition of cystic degeneration without much disease of the tubes. In most of the cases the patients were absolutely bedridden. For the most part the operation was performed for the relief of physical pain. By no means did all the patients have dysmenorrhœa, and in the majority of cases in which dysmenorrhœa did exist it was associated with disease of the tubes.

DR. RIPLEY asked if, in the case in which there was uterine catarrh, with extensive pelvic adhesions, it was possible to cure the woman without resorting to such a heroic operation.

DR. WILEY thought it was not, as she had already been under treatment for a long time, had become an opium-eater, and was bedridden. Possibly the dysmenorrhœa might have been cured; but according to his observation, in all cases in which there had been what is called cellulitis, in the existence of which he did not believe, the tubes were usually involved, and he regarded it as the best procedure to remove them.

THE PRESIDENT asked if in the two cases reported as having died from the escape of septic matter into the peritoneal cavity, any effort was made to secure drainage.

DR. WYLIE said that in all of the cases except one, drainage was looked after carefully.

THE PRESIDENT asked what antiseptic precautions were observed.

DR. WYLIE said that the precautions consisted in the use of clean instruments, sponges, and hands, one assistant, shaving and washing the patient with bichloride solution (one in five thousand), and making the abdominal opening as small as possible. In only two cases had he washed out the peritoneal cavity, and in both the patient recovered.

THE PRESIDENT thought there were two cardinal points in abdominal surgery; first, cleaning and disinfecting the cavity after the operation; and, second, the institution of free drainage. From some recent experience he felt encouraged in the belief that the rate of mortality in abdominal surgery could be reduced still further than it had already been done. When a student he was taught that rupture of the bladder with the escape of urine into the peritoneal cavity was sure death. He recently saw a case of this kind in which a careful toilet was made with a pretty strong solution of bichloride of mercury, and there was no reaction whatever. The wound in the bladder was stitched to the edge of the external wound. He had also seen a case in which the peritoneal cavity became more or less filled with the gelatinous contents and septic matter from cysts, and in which the peritoneal cavity was filled with the warm sublimate solution (one to eighteen thousand) until it ran over, when the cavity was emptied, and this operation was repeated two or

three times until all septic material had been washed out and the cavity thoroughly disinfected. There were no evidences of sepsis after the operation, and no peritonitis occurred.

DR. WYLIE said that in private practice he had had twenty-two cases, with only one death. Of the eleven cases reported this evening, nine were in private practice, and in all the patients recovered.

DR. C. H. KNIGHT presented a specimen with the following history:

PERINEAL SECTION AND INTERNAL URETHROTOMY FOR STRICTURE AND URINARY FISTULÆ—HYPERTROPHIED BLADDER.

A. N——, forty years of age, Spanish, single. Patient had first gonorrhœa twelve years ago, and a second attack two years later. After last attack had several abscesses in perineum following partial retention. Was obliged to use catheter for a year or more habitually, and at times ever since. More than half the urine now passes through two perineal fistulæ, just to the right of raphe and one and a half and three inches in front of anus. Is obliged to urinate at least six times during the day, and rises twice or more times during the night. The urine is generally thick, and contains large quantities of pus. The perineum is very thick and inelastic, and is covered with scars of old abscesses, some of which have been incised, others having opened spontaneously. Meatus admits No. 24 (Fr.). At 4½ inches there is a contraction to No. 22, and No. 20 is arrested at 5 inches. No attempt has hitherto been made to close the fistulæ or divide the strictures. The fistulæ were laid freely open, but their point of communication with the urethra could not be discovered. They were traced backward a considerable distance, until the point of a probe could be felt separated from a small guide in the bladder by merely a thin layer of urethral mucous membrane, and then the urethra was opened by a free incision. From the same point, about five inches from the meatus, the urethra was divided with dilating urethrotome along the entire extent of its upper wall to No. 32, the meatus having previously been enlarged with a bistoury. Sounds were passed regularly for six months. The perineal wound gradually closed, until only a few drops of urine came through the false passage, and frequently none at all would appear for several days continuously. Fifteen months after the first operation the patient had a severe fall, and in a few days an abscess formed near the anus, behind the perineal fistula. The opening of this abscess resulted in a marked increase in the proportion of urine passed by the perineum. No sounds had been used for six months, and slight recontraction was found with No. 30 bulb at about five inches. Patient was very anxious to have fistula closed, and the first operation was practically repeated, the urethra being divided so as to admit No. 36 sound easily to bladder. The patient recovered from this operation as rapidly as from the first. The perineal wound quickly closed, and after the tenth day no urine passed by the perineum for a period of five weeks, when a few drops appeared, without the formation of a fresh abscess. This occurrence greatly depressed the patient, and soon after, having had a serious quarrel with a business associate, he took an enormous dose of potassium cyanide and died in a very few minutes.

The specimens, removed at the New York Hospital by Dr. Thayer, of the House Staff, show the effect upon the bladder of prolonged urethral obstruction, a large periurethral abscess in the deep urethra, and the appearance of the urethra two months after an internal urethrotomy. The kidneys and other viscera showed no evidence of disease, but the stomach was intensely congested from the action of the poison. The vesical wall is much thickened, the hypertrophy being most marked in the muscular coat, and the capacity of the bladder seems to be diminished. The mucous lining is also somewhat thickened, but is smooth and free from erosions. The prostate gland is somewhat hypertrophied. Just behind the junction of the prostatic with the membranous urethra, and to the right of the veru montanum, are two fistulous openings, separated by a band of tissue one-eighth of an inch in width, and entering the cavity of an abscess, which partially surrounds the membranous urethra and extends backward toward the prostate gland. Half an inch in front of these two fistulæ, and communicating with them rather than with the abscess cavity, is the small opening of a third fistula, which runs just beneath the mucous membrane. In the median line of the floor of the membranous urethra is the mouth of a fourth, which opens directly into the abscess. This is the larger of the fistulæ and readily admits a No. 28 (Fr.) sound. The smallest will receive only a small probe. The capacity of the abscess is estimated at about two drachms. The pendulous urethra shows along its upper wall a "cicatricial splice," the result of the internal urethrotomy, about one-third of an inch wide at its widest part. Their position and the remoteness of the fistulous openings from the point of urethral contraction suggest the possibility of their having been caused by instruments, and there is, moreover, a history of rather rough handling and of profuse hemorrhages on several occasions after instrumental interference. An interesting point in the clinical history of the case is the re-establishment of vesical tolerance after removal of urethral obstruction by the internal urethrotomy, notwithstanding the evidently reduced capacity of the bladder. Previously the necessity of emptying the bladder had been frequent and urgent; after the operation the intervals between the acts of urination were of natural length and the bladder seemed to be under perfect control.

DR. AMIDON asked if the hypertrophy of the bladder had anything to do with the maintenance of the perineal fistulæ.

DR. KNIGHT thought it doubtless had, and was also of the impression, from the position of the fistulæ, that they were produced by instruments.

THE PRESIDENT remarked that he never fully appreciated how little was known concerning the introduction of steel sounds into the bladder until he began teaching.

DR. RIPLEY said he once had a patient at St. Francis' Hospital, sixty years of age, who had not passed urine through the urethra for six years. He performed external perineal urethrotomy, and the fistulæ closed.

THE PRESIDENT believed that in the majority of cases the fistulæ would heal after perineal section.

FIBRO-SARCOMA OF THE NASO-PHARYNX.

DR. R. P. LINCOLN presented a specimen, removed June 23d from the naso-pharynx of a man, seventeen years of age, from whom he removed a similar growth eleven months ago and presented the specimen to the Society in October last. The second specimen was chiefly interesting on account of the method of treatment. In the first case he removed the tumor by the use of the galvano-cautery écraseur, intending to cauterize the stump thoroughly until the seat of the growth was entirely destroyed. Although he had the assurance of the patient that he would return and have the stump cauterized, he failed to keep his promise, and Dr. Lincoln had opportunity to make only occasional applications. Finally the new growth became so much enlarged and gave the patient so much inconvenience that he submitted to another operation, and Dr. Lincoln hoped to be more successful than formerly in obtaining opportunity to repeat the caustic applications to the stump. The tumor presented was quite vascular, as was the case of those of reproduction, the vessels increasing in size with each new growth. It filled the right nostril and the post-nasal cavity, and had a broad attachment. The wire grasped the tumor well up to its insertion. The case illustrated the necessity of repeated cauterizations of the stump after removal of such a neoplasm.

DR. JACOBI asked Dr. Lincoln if in most of his cases the patients were young persons.

DR. LINCOLN replied that in most of the cases the patients were under twenty years of age. A patient, however, whom Dr. Knapp had sent to him to-day, was a man probably forty-five years of age.

FRACTURE OF THE OCCIPTAL BONE.

DR. W. P. WATSON presented the occipital bone, removed from a man, nineteen years of age, who received an injury of the head, probably from a stone. It was a coroner's case, and it was to the coroner he was indebted for the specimen. The man was hit on a Wednesday. He went to his work on Thursday, worked all day, and also on Friday and Saturday. But Saturday evening he complained of headache, went to bed, sent for a physician, who found the patient unconscious. The subsequent clinical history of the case Dr. Watson had been unable to obtain. At the autopsy there was found in front of the occipital protuberance a soft spot in the scalp. On turning back the scalp there was found a well-marked ecchymosis about an inch and a half in diameter. On removing the calvaria there was found a fracture, commencing at the occipital protuberance and extending downward three and a half inches, involving a portion of the margin of the foramen magnum on the right side; on the left side it did not extend down to the margin of the foramen. There was marked congestion of the brain and meninges. When the patient was admitted to St. Francis' Hospital, Hoboken, on Tuesday, he had tonic spasm, the pupils were irregular, sometimes responding to light and other times not; the bowels and urine normal; the patient was unconscious. About two or three hours before death there was quite a profuse hemorrhage from the nostril.

DR. VAN SANTVOORD said he had had opportunity to make several autopsies in cases of this kind, and in all death occurred from surface hemorrhage; the fractures themselves were apparently innoxious.

DR. WYLIE referred to the case of a young man who received an injury of the head, had hemorrhage from both ears followed by serous discharge for ten days, and also hemorrhage from the pharynx. He gradually recovered without special treatment, except rest.

THE PRESIDENT remarked that hemorrhage from the ear was not necessarily an indication of fracture of the base of the skull.

DR. WYLIE said no, but there was in addition a discharge of serous fluid from the ear for ten days.

THE PRESIDENT referred to a most remarkable case, the specimens from which were in Wood's Museum, that of a sailor who fell twenty feet and struck square upon his buttock and received no fracture at all except at the base of the skull, where there were twelve different fractures caused by displacement of the bones of the spinal column upward.

CATARRHAL ULCERS OF BOTH VOCAL CORDS.

DR. VAN SANTVOORD presented a specimen illustrating catarrhal ulcers of the vocal cords, resulting from ulceration of the larynx accompanying measles. The patient was an infant, eight months and ten days old at the time of death, and an inmate of Randall's Island Asylum. It was suffering from the early symptoms of measles when admitted. The eruption developed on the second day. On the second day of the eruption the child began to have cough of croupy character, preceded by severe pharyngitis. On the fourth day of the eruption there was entire loss of voice. The child died of extensive broncho-pneumonia and bronchitis.

At the autopsy, in addition to the broncho-pneumonia and bronchitis, the larynx was found to be very much congested, and at the posterior half of each vocal cord there were found ulcers which appeared as if covered with slough. He had had occasion to make a number of autopsies in which there were broncho-pneumonia and bronchitis following measles, but as a rule he had not examined the larynx unless there had been some special evidence of laryngeal trouble before death, and had not before seen the condition illustrated in his specimen. On looking up the literature of the subject, however, he found that it was not very uncommon. Rilliet and Barthez stated that about one-half of the fatal cases of measles showed ulcerations of the larynx. In this case there were no symptoms of laryngeal obstruction.

FATTY DEGENERATION OF THE HEART—CONCENTRIC HYPERTROPHY.

DR. J. H. RIPLEY presented the heart removed from the body of a man, sixty-seven years of age, who, one year ago, weighed two hundred pounds. His history showed that he had never been sick to any extent until last July; he had never had either rheumatism or syphilis. Last August he had an attack of diarrhœa accompanied with abdominal pain. At the end of a week Dr. Ripley saw him and found him suffering from intense pain over the hypochondriac region, but at that time the diarrhœa had ceased. There was a great deal of tenderness over the region of the liver, and the area of hepatic dulness extended four inches below the free border of the ribs. The temperature was 101° F. The constitutional symptoms, except the pain in the hepatic region, were not very grave. He was struck with one symptom and that was the great frequency of the pulse, together with its extreme feebleness and irregularity—one hundred and sixty to the minute, irregular, and at times almost imperceptible. There was marked turgescence of the cervical veins; there was œdema at the base of both lungs. Dr. Ripley diagnosed the acute trouble as perihepatitis. At the end of a week the patient recovered from the acute attack, and so far as the bowels were concerned they were constipated afterward. He did not rally thoroughly from the attack, and little by little his dropsy increased, both pleural cavities became involved, and later he had ascites and extensive anasarca. All treatment failed to reduce the increasing dropsy. In November Dr. Ripley punctured the cellular tissue of the lower extremities and water drained away in large quantities. The pleural cavities became free, also the abdominal dropsy and anasarca disappeared. The pulse, however, continued rapid, irregular, and feeble, at times two hundred to the minute. The patient suffered from dyspnœa and anorexia principally. After he had watched the case for a time Dr. Ripley made the diagnosis of probable fatty degeneration of the heart, and based it upon the condition of the stomach, with the great rapidity of the heart's action, the condition of the veins of the neck, and the dropsy. Up to November 1st, despite very careful examination, no cardiac murmur was discovered. Later on there commenced a perceptible murmur at the apex, which was not transmitted, and still later on, a murmur was heard at the base of the heart. By January 1st the patient had so far recovered that Dr. Ripley discontinued his visits, although there remained considerable dropsy, but the patient had a fair appetite. While Dr. Ripley was attending the patient there was no evidence of Bright's disease. Not long after he ceased his visits the patient got worse, but went under the treatment of an irregular practitioner, under whose care he remained until death. As near as Dr. Ripley could learn, the man had general dropsy, which was removed by hypercatharsis two or three times. The patient gradually emaciated until he did not weigh more than one hundred and forty pounds, and his skin always had a yellowish, saffron color.

A partial autopsy revealed extensive infiltration of the cellular tissue with serum; three pints of serum were found in the abdominal cavity; the pleural cavities contained about six quarts of fluid; the pericardium contained not more than one or two drachms of fluid; the liver was considerably enlarged, its capsule thickened, and on section it resembled ordinary nutmeg liver; the kidneys were covered with an unusual quantity of fat, the capsule was adherent, and the cortical portion thick-

ened; the spleen was about the size of a pullet's egg, contained two lobes which were attached to each other by a capsule; the lungs had become carnified at the bases, and there were old pleuritic adhesions.

The organ chiefly interesting was the heart. The pericardium contained an unusual quantity of fat. The aortic valves were very much thickened, shrunken, and apparently insufficient. The cordæ tendinæ of the mitral valve were thickened and shortened, and the valve itself was shrivelled, and the orifice was in a state of stenosis. The walls of the left ventricle were very much thickened; the capacity of the ventricle was very much lessened; it would not contain more than one or two drachms of fluid. It was a case of concentric hypertrophy. The tricuspid valves were thickened, and there were some fibrinous deposits on the anterior suface. There was but slight atheroma of the aorta. The coronary arteries were healthy.

On microscopical examination of the muscular tissue many of the primitive fasciculi were literally filled with small fat-globules, and the striæ were indistinct. Dr. Ripley took pains to examine the right ventricle and both auricles, and found that the muscular tissue in all of them had undergone extensive fatty degeneration, more marked in the right than in the left ventricle, and the auricles were not much better.

He presented the case because, although fatty degeneration of the heart was very common, still its clinical history had not been written up very extensively. In addition to the clinical history already given, it might be added that the arteries throughout the body did not appear to be atheromatous.

The Society then went into executive session.

British Medical Association.

FIFTY-THIRD ANNUAL MEETING.

Held at Cardiff, on Tuesday, Wednesday, Thursday, and Friday, July 28, 29, 30, and 31, 1885.

REPORTS OF SECTIONS.

(Continued from page 218.)

PUBLIC HEALTH SECTION.

THURSDAY, JULY 30TH—SECOND DAY.

DR. DAVIES in the Chair.

MR. FRANCIS VACHES, of Birkenhead, read a paper on

SUMMER DIARRHŒA OF CHILDREN, ONE DISEASE OR MANY.

He pointed out that in 1883 there were 15,000 deaths, and in 1884 25,000 deaths from diarrhœa. The number of deaths in the latter year was more than half the total number from the two chief zymotic diseases. After dealing with the question at considerable length, Dr. Vaches found it impossible that the immense infant mortality referred to diarrhœa every summer could be due to one disease.

DR. MARTIN, of Bolton, thought that summer diarrhœa was often due to altered quality of the milk.

DR. WIGHT, of Southport, thought the health returns should be more discriminating.

DR. SWETE, of Worcester, said it was very difficult for the medical officer to get proper returns in such a question as this.

DR. PAINE, of Cardiff, said the difficulty of giving correct returns of the causes of death was very great. The Registrar-General had recently called attention to the number of cases in which death was put down to diphtheria, which he believed was due to careless diagnosis. The same remark applied to diarrhœa, which was a symptom and not a disease. First of all, diet was a common cause of diarrhœa, and then came temperature and rainfall, which, taken singly or together, might produce disease. He inquired into the question of one hundred and ten deaths from diarrhœa, and in only one case had the child been breast-fed. Cow's milk should not be used for at least fourteen days after calving. In July, August, and September there was the question of temperature which gave a proclivity to disease. In 1883 the mortality from diarrhœa in the eastern part of Roath was one hundred per cent. more than in any other part of the district, and there were imperfect sewers there, which much favored zymotic diseases. The average rainfall in Cardiff was forty-three inches, and last year thirty-six, so that more diarrhœa prevailed. Disinfectants had been poured into the sewers, and this appeared to have much lessened the mortality from cholera.

SURGEON-MAJOR PRINGLE thought that much of the milk brought to market was unfit for the food of children.

DR. DAVIES thought that diarrhœa was, to a certain extent, a generic name, but he could not admit that all the diseases which came under his treatment were merely symptoms. Some of the diarrhœa cases he said had cow's milk, others bread and water, and lived in houses under £20 rental.

DR. BULLARD, of London, said he had tried to get to the bottom of this question, but unfortunately had not been well enough supported by the members of the profession.

DR. PAINE had noticed at one time, when cholera was prevalent in Cardiff, that it did not occur among the Irish infants, whose parents did not buy cow's milk, but fed their children on oatmeal and water.

DR. DAVIES noticed that Irish women nursed their own children.

DR. DRYSDALE, of London, said that there could be no doubt that the cause of many of the deaths from diarrhœa was the drinking of milk and other fluids containing organisms which were true poisons. These were particularly lifelike in the hot, summer months. Good milk was in many instances the best cure for diarrhœa in children, but the milk must in many cases be boiled, and of course the bottles used in infantile feeding maintained scrupulously clean. A large number of children of the poor in London died from diarrhœa through being brought up by hand, and in 1847, when he was on a tour in Ireland, at the time of the famine, children were carried off in large numbers from the diarrhœa caused by starvation.

DR. MARTIN, of Bolton, read a paper on

OVER-PRESSURE IN SCHOOLS AND HOME LESSONS.

Over-pressure injures the health of children, produces misery at home, both for parents and children, almost every night. Children, in order to keep pace with the present code, have to pore over their lessons (in some instances) until ten, eleven, or twelve o'clock at night (as do pupil teachers, who should be growing in body and mind). Next morning the child goes to school without being able to eat its breakfast; the effect of this upon the brain and nervous system takes away the appetite, enervates the child, and stunts its growth; then follow headaches, vomiting, nervous debility, brain fever, talking and walking about in the bed-room in the night, St. Vitus' dance, curvature of the spine, heart disease, myopia, spitting of blood, and in some instances convulsions and death. I have personally seen all the above in my own district. The dread of the examination, of the inspector's visit, the anxiety to gain a prize, or the thought of not being able to pass the examination, so as to leave school in order to work for a livelihood, have each and every of them a share in the production of mischief. The master or matron is worried and in misery about the grant, the inspection, the school pence, and the managers; and to aid in increasing the number of passes and the augmentation of the grant, the managers or teachers in some instances send for all children (even from houses where there exists infectious or contagious disease) to be present at the examination, no provision being made in the Education Act for the

counting of those as present at the examination who have been kept from school for the protection of the public health. In reference to schools, light, position, ventilation, and proper warmth are all essential to the health of children and teachers. I now repeat what I stated on May 4, 1883, viz.: "It is very important that children who have a capacity for education in the higher branches of knowledge should have every opportunity of gaining such knowledge, and that the State should assist. It is also very necessary that a child or young person be at school five or six hours a day, but I often see children whose health is injured by over-study or brain work; such children might very properly be excused what teachers call home work, to enable them to learn domestic duties, and assist their parents or guardians. At the same time it would make them more healthy and more fitted to the wants of the country."

Since I read my paper at Liverpool in 1883, home lessons have ceased at some schools for very young children, and parents now know that home lessons cannot be insisted upon and are illegal. The examinations have been less rigid; but still the code is too high, and as it is monstrous to imagine that all children can be brought up to the same level, the boasted one hundred per cent. of passes is a very strange thing. The head master or mistress of every school ought to have the option of removing from examination, at least, seven per cent. of those who can give their whole time to school, and fifteen per cent. of "half timers," who have not the same privileges as others; this, with an allowance for children kept from school for the protection of the public health, would mitigate to some extent the evils existing. The special committee of the London School Board admit that they have not had the advantage of practical medical testimony when speaking of increased physical benefit. But it has been stated that "throughout the country the voices of managers, teachers, and employers of labor bear witness to the diminished vigor and attenuated limbs of the children of our working population, and ask if there is no way of opening the eyes of our education theorists to the bitter and terrible wrongs inflicted on our young." Professor T. Pridgen Teale, a very high authority, says he is "simply horrified at the refinement of human slavery and torture invented and carried on in this civilized country." The question of ill-fed children is a very important one, but of all the cases that have come under my care, only two could be said to be due to improper feeding, and not one to want of sufficient food; the punishment must be severe where a child is crammed in the head, and nothing in the stomach. Teachers also come in for a full share of torture. Three teachers have died in the Bolton District within a very short time, all comparatively young; one of them died on the very day of the examination of his school. It is a well-known fact that myopia is unknown among the wild tribes. Some time ago, at Berne, Professor Pflüger, a great authority, gave it as a fact that more than one-half of forty-five thousand children examined in Germany, suffered from defective vision; in some schools those suffering from myopia, or shortsightedness, amounted to seventy or eighty per cent., and the commission actually found twenty per cent. of the boys, and from thirty to forty per cent. of the girls, suffering from curvature of the spine. The most enthusiastic devotee of excessive education would regret to see the above state of things take the place of the indomitable pluck, energy, and endurance of our forefathers.

Dr. Swete, of Worcester, said that there could be no doubt that over-pressure in schools was due to the way in which parents were pushing on their children to get on in the world, and, as an inspector said in his district, the children had too much brain food and too little stomach food. In Scotland, where children studied well, they were fed on oatmeal porridge and milk, but in English towns the children got scarcely any phosphates and too much brain work for their stamina.

Dr. Drysdale, of London, said it was an axiom in his mind that children could not be better educated than they were fed. The chief point in education was first of all to give good nutrition, and he was convinced that the State system of education, as at present in vogue, would break down, unless the supply of children were greatly reduced, so that the number to be educated did not exceed the capacities of the capital of the country to feed, clothe, and house adequately. It would be possible for the State to insure comfort and education to all born into it, but if it did this it was bound, as J. S. Mill said to us, to see that no one was born without its consent.

Surgeon-Major Pringle said he was much struck on returning to this country after an absence of twelve years, to find so many boys and girls wearing spectacles, and suspected this must be caused by the over-pressure in Board schools.

Dr. Mantle read a paper on

INFECTIOUS SORE THROAT WITH RHEUMATISM.

He exhibited some microscopical slides, showing the organisms which had been, in his opinion, the origin of this disease, which appeared to be epidemic and contagious at present in some localities.

Dr. Swete, of Worcester, read a paper on

A DANGER WITH CONSTANT WATER SUPPLY.

He showed that suction brought sewage and other deleterious matter into the water-pipes. They must, therefore, try to prevent the suction. If there was no vacuum in the water-pipes there could be no suction. He exhibited a valve for placing on the highest point on the water-pipes, which valve would let the air in without letting the water out. This plan was approved of by many of the members of the Section.

The meeting then adjourned.

FRIDAY, JULY 31ST—THIRD DAY

Dr. Davies, of Bristol, in the Chair.

The first paper was read by Dr. C. R. Drysdale, of London,

ON THE INFLUENCE OF COMFORT IN LOWERING THE DEATH-RATE.

The author said that this point had been first discussed clearly, as far as he knew, by Dr. Villermé, of Paris, in 1832, who had showed that in Paris the death-rate of persons in easy circumstances between the ages of forty and fifty, was only 8 per 1,000 per annum, while it was 18.7 per 1,000 among persons of humble circumstances. And that the death-rate in the poor quarter, twelfth arrondissement of Paris, was 1 in 15 persons as against 1 in 65 in the rich quarter, or second arrondissement. It had recently been shown by M. de Haussonville in the *Revue des Deux Mondes*, of 1884, that there were three times as many children to a family in the twelfth, as in the second arrondissement. The remarkable statistics of C. Ansell, junior, of the National Assurance Society of London, had showed that of 100,000 born of the professional classes and gentry at a given age, 80,000 were alive, as against 65,000 of the general population. The present statistics of the various districts in London was a complete confirmation of these statistics of rich and poor mortality. The rich suburb of London, Hampstead, had a very low death-rate, 11.50 per 1,000 per annum, as against a poor quarter, St. George's parish, Whitechapel, with a death-rate of 26 per 1,000. Here, again, the birth-rate was, as in Paris, in the inverse ratio of the death-rates. The birth-rate of Hampstead was but 22 per 1,000 as against 40 per 1,000 in the Whitechapel parish. His own hospital, the Metropolitan Free Hospital of London, was in the Whitechapel district, and he had found that the average of children to a family among

his married female patients over forty-five years of age was more than seven children, whereas the number of children among the professional classes in Paris was not two to each family. The death-rate of the children in Whitechapel among the poor was often twenty-five to thirty per cent. in the first year of life, against eight per cent. among the infants of the well-to do classes in England and France. His conclusion, therefore, from all these glaring facts, was that the further lowering of the death-rate among the poorer classes would be an impossible matter so long as families were so large in that class. If only the birth-rate among the classes with the lowest wages was as low as 25 per 1,000 instead of 40 per 1,000, he saw no reason why the death-rate of England and Scotland might not fall to 12 per 1,000, as it was in well-fed New Zealand. The State would have to discourage the production of families of more than four children, sooner or later.

DR. PAINE, of Cardiff, agreed with the opinion put forward by Dr. Drysdale, as to the superior mortality of the poor, although it was remarkable that sanitary efforts had reduced the death-rate among the poor in a greater ratio than it had among the well-to-do in Cardiff. The statistics of London cited were true of the poor Irish population of Cardiff, which was next door to mendicancy in many cases. The birth-rate in Cardiff was 41 per 1,000, yet the infant mortality under one year was rather low. He had often said that the natural death-rate of a population should not exceed 15 per 1,000, and thus in Cardiff there were at least 5 lives more per 1,000 annually that should be saved, which future laborers in hygienic science must work for.

DR. DAVIES, of Bristol, said that poverty was clearly a factor in causing high death-rates, and in Bristol that was because the zymotic diseases attacked the children of the poor, who crowded into small house accommodation so much more than did the well-to-do classes. In Bristol the poorer classes had good food; but they were exposed to cold, and the children were not nursed carefully enough. There was a charitable association in that city which did its best to remedy this misfortune of the poor. The death-rate of Bristol was only 2 per 1,000 lower than that of Clifton, which was very consoling. He did not see how the poor could be enjoined to have smaller families. The evil to be combated was the Poor Law system, which made the poor thoughtless, so that, unlike the professional classes, who postponed their marriage-day until the man was thirty, the poor married at twenty, and in eight years had five or seven children to provide for. The poor should not be taught improvidence by the law.

DR. PRINGLE said that in Lewisham, London, where he resided, there was an immense amount of overcrowding, which was caused by the imperfect supply of house accommodation and the very high rents the poor had to pay.

DR. RICE MORGAN, of Swansea, said the paper covered a most important ground, and related to the age, distribution of the population, and wealth of its members. Poverty and discomfort were not always synonymous, for many operators who were well off lived in wretched tenements to save money in rent.

DR. DRYSDALE, of London, said that he was glad to find such eminent public officers acknowledging the gravity of the question. For his part, he had long been convinced that the next move in sanitary science must be in the direction of the State discouraging the multiplication of misery by means of those large families which no one wished to see, and least of all the parents. If the birth-rate of Brompton was only 19 per 1,000, against 40 per 1,000 in Whitechapel, it was clear that intelligence might alter that, and doubtless in the near future sanitary science would, in the words of the great economist, J. S. Mill. come to look upon the producing of large families in any class in European countries in the same way as they now looked on drunkenness or other preventable cause of death and misery.

DR. BRINDLEY JAMES read a paper entitled "Are Coroner's Juries Necessary?" He contended that such was not the case, because in France, Belgium, and other countries, the system of the *médicin des morts* was a far better guarantee against crime than our jury system. To prove this he alluded to the Becarmi poisoning case in Brussels, some years ago, where a husband poisoned his brother-in-law from sordid motives, with the assistance of his brother and his wife. The poison used was nicotine, and the *médicin des morts* who investigated the case detected the poison in the vomited matter, while had this case been put before a jury the man would have got off. The publicity of English juries was extremely painful to the relations of many poor people who had accidentally died, and who were maligned in the daily papers after death because they had occasionally used alcohol. He was of opinion that some system of the kind should replace the happy-go-lucky system in England.

DR. DRYSDALE, of London, spoke in praise of the French *médicin des morts*, who came at once on a death occurring and thus made a clear piece of statistics in case of children dying within the first six weeks, many of which did not appear either as births or deaths in English mortality statistics.

DR. DAVIES said he had made a suggestion some years ago to the authorities that there should be two coroners in each district, one of whom should be a medical man.

DR. JAMES thanked Dr. Drysdale and Dr. Davies for the approval they had expressed of his views, which he felt very strongly.

DR. J. LLOYD ROBERTS read a paper on "Epidemic Pneumonia."

DR. MIGHT read a paper entitled "Remarks on the Present Management of the Sanitary Medical Service, with Suggestions for its Improvement." He was strongly in favor of a more educated class of the community being the directors of the sanitary board in each city.

The Section then separated with a vote of thanks to Dr. Davies, of Bristol, for his most able and courteous conduct in the president's chair.

DR. DAVIES said this was the most self-denying of all the sections, since it did its very best to get rid of the very diseases on which medical men lived.

SECTION OF PHARMACOLOGY AND THERAPEUTICS.

WEDNESDAY, JULY 29TH—FIRST DAY.

THIS Section opened with an address by the President, PROFESSOR FRASER, of Edinburgh, who began by complimenting the Association for forming the Section, of which the present is only the second year, and then proceeded to administer a further compliment—some would say the puff direct—to the *Journal*. He then dwelt on the propriety of separating pharmacology from other branches of study, and urged that there ought to be at every great medical school a properly equipped laboratory for research on this subject. He held such laboratories to be as necessary as they were admitted to be for the prosecution of chemistry and physiology.

PROFESSOR LEECH, of Owens College, then read his paper on "The Duration of the Action of Medicinal Substances," a subject which seemed to interest the Section less than might have been expected, though some interesting remarks were made, and the paper when published will be worth perusal.

Then came a discussion on

SUBCUTANEOUS MEDICATION,

introduced by DR. TALFOURD JONES. In connection with this a paper was read on the "Subcutaneous Use of Quinine," by DR. L. AITKIN, who also contributed interesting remarks on "Ergotine in the Hemorrhage of Typhoid Fever." Dr. Spender and several others contributed remarks, but altogether the discussions on the first day scarcely came up to the expectation that had been formed when the arrangements were made for this Section.

THURSDAY, JULY 30TH—SECOND DAY.

DR. E. LONG FOX, of Clifton, opened a discussion on the "Action of Diuretics," in which several gentlemen took part.

The President, DR. FRASER, F.R.S., read a paper on the "Action and Uses of the Digitalis Group, with Special Reference to Strophanthus Hispidus." He related his experiments with the last-named drug, with which he seems to have been occupied for a considerable period. There is no doubt about its very powerful influence upon the heart, and it will probably come into use, but at present very few persons seem ever to have seen it or heard of it. The reporter only met with two gentlemen in the Section who were acquainted with it, and both of them were professors. This being the case, there could be but little discussion, but a good deal of interest was excited by the demonstration which followed, by DR. STOCKMAN, of Edinburgh, of the action of strophanthus hispidus on the heart of a frog by means of an apparatus which recorded the tracing so that it could be carefully compared with the tracing produced by the heart's beat immediately before the application of the drug.

The Section was asked to consider a proposal of DR. BALTHAZAR FOSTER, made through the Collective Investigation Committee,

THAT THIS SECTION SHOULD DISCUSS NEW REMEDIES, AND MAKE A SELECTION FOR FURTHER INVESTIGATION IN CONJUNCTION WITH THE COLLECTIVE INVESTIGATION COMMITTEE.

THE PRESIDENT rather threw cold water on the project, remarking that he did not himself expect much good to result from a superficial investigation such as that proposed, but he would be happy to hear the opinions of those present. No one responding to this invitation, he then asked Dr. I. Owen to state on behalf of the Collective Investigation Committee the exact nature of their proposal.

DR. ISAMBARD OWEN thereupon explained the project, and proposed that the Section should appoint a subcommittee to co-operate with the committee he represented.

THE PRESIDENT again invited an expression of opinion, but there was no response. There were not a dozen members in the room; none of them seemed to care one way or the other. The question was therefore put from the Chair whether such a sub-committee should be appointed; some in very weariness held up their hands and the proposal was declared carried. Then followed the naming of the committee; the President declined to serve, as did one or two others, but eventually the two Secretaries and Dr. Murrall were appointed.

A list of drugs was next proposed, but the Section seemed too weary to consider them, and a proposal to leave the selection to those who undertook the investigation was welcomed as a relief, and though not formally put was allowed to pass, and the subject dropped.

DR. NORMAN KERR read a paper,

OUGHT ALCOHOL TO BE PRESCRIBED, AND HOW?

It was anticipated that this would lead to some discussion, Dr. Kerr being known as a thorough-going advocate of teetotalism; his paper, however, was a very moderate one. He by no means advocated a refusal to prescribe alcohol, but insisted that it should only be given for definite purposes and in duly adjusted doses. As he concluded only a few minutes remained for discussion, and no one seemed desirous of occupying them by either controverting or supporting the views advanced.

If this day's proceedings were to be considered as a test, it must be acknowledged that the Section scarcely justified its formation; the real work could have been done elsewhere.

FRIDAY, JULY 31ST—THIRD DAY.

A debate had been arranged on "General and Local Anæsthesia," and was opened in a very long and extremely uninteresting paper by DR. DUDLEY BUXTON, who waded through it in a most tedious manner, but steadily persisted in reading every word, though his audience became smaller by degrees and beautifully less, scarcely half a dozen being able to sit it out to the end. He occupied rather more than an hour and a quarter, although every copy of the programme stated that no paper in the Sections must exceed fifteen minutes. He confined himself principally to general anæsthesia, the causes of death, the differences between ether, chloroform, and other substances employed, and the manner in which they acted, with many other points which will probably be interesting to read, but were positively painful to listen to as they were droned out. At last he sat down, and the President rose to state that Professor Cheyne, who had promised to attend, had been prevented, but had forwarded a statement of his views in a printed pamphlet. This pamphlet contained a reprint of a lecture to the Professor's surgical class, and had already been printed in the *Practitioner* with prefatory remarks. The Professor had caused a copy to be given to every one entering the room, nevertheless the President decided to have it read. This was the sequel for a further exodus of the long-suffering members, and great indignation was expressed afterward at the conduct of the President in thus wasting the time, which it was freely said he would not have permitted had the author not been a Scotchman and a colleague.

Mr. Bailey, Dr. Redwood, Dr. Talfourd Jones, Dr. Bampton, and another or two made a few remarks, after which Dr. Buxton got up to reply and occupied a considerable portion of the remaining half hour. Only a few minutes were then left, and any other papers had to be taken as read, as the President declared the work of the year to be concluded.

SECTION OF OBSTETRIC MEDICINE.

THURSDAY, JULY 30TH—SECOND DAY.

(Continued from page 215.)

The next paper was by MR. LAWSON TAIT, of Birmingham, and was entitled

MODERN TREATMENT OF UTERINE MYOMA.

Mr. Tait referred to the advances which had of late years been made in pelvic and abdominal surgery. He then introduced the present subject by narrating two cases. They were sisters, and came to consult him at the same time. One was thirty-eight years of age, unhealthy and anæmic in appearance; the other was thirty-six years of age, and seemed to be in perfect health. To his surprise the latter announced herself as the patient. She had a uterine myoma which reached to the ensiform cartilage. She had been advised by several medical men to let it alone and have nothing done for it. When he had examined this patient the sister expressed her wish to be examined also. He accordingly examined the elder one of the two and found her to be also suffering from uterine myoma. It was a small one, and she had been treated by a pessary. Thus, said Mr. Tait, he actually had at the same time in his consulting room, two women, sisters, both of whom suffered from uterine myoma. The elder had but a small tumor but had been much reduced by hemorrhage; the younger had what was virtually—from its rapid growth—a malignant tumor reaching to the ensiform cartilage. In his opinion, neither of these women could have lived five years. Mr. Tait's treatment for uterine myoma was the removal of the uterine appendages. This caused the cessation of menstruation. The hemorrhage ceased and the myomata disappeared. In one case on which he had operated the menses recurred. He had not, he said, full notes of the case, but he had probably omitted to remove the tubes, which he now always made a point of doing. Mr. Tait said he considered his treatment of uterine myoma was as justifiable as any other surgical procedure, and the secondary

results were as good. It saved life and removed suffering as satisfactorily as did the removal of an ovarian tumor. Up to January, 1884, he had operated on fifty-eight cases. He had followed up the history of his cases, and out of fifty cases, there were forty-five of which he could give a complete and satisfactory account. As for the danger of the operation, he thought the mortality ought not to be one per cent.

Mr. Tait briefly referred to insanity as a complication. Two of his cases had been removed to asylums soon after being operated on. In one case the insanity manifested itself before the operation; in the other, acute melancholia came on as soon as the patient recovered from the anæsthetic. He alluded to other cases in which insanity had followed abdominal operations. He had himself seen it after removal of an ovarian cystoma, after hysterectomy, and even after a simple exploratory incision. It was not unknown after other surgical procedures, even those which were non-abdominal. Mr. Tait referred at some length in his paper to the opposition which he had excited and the obloquy which had been cast upon him. A paper read by him before the Royal Medical and Chirurgical Society had been thought unworthy of being printed in its "Transactions." He had, therefore, forwarded it to *The American Journal of the Medical Sciences*, where it had appeared. He maintained that the operation was perfectly justifiable, and had saved the lives of many patients who, but for it, would have died.

Dr. Gervis said that there were two justifiable plans of treatment for uterine myoma, viz., 1, to remove the uterine appendages; 2, to perform hysterectomy.

Dr. Playfair said Mr. Lawson Tait had, with his usual vehemence, set up an enemy merely to knock him down again. Gynecologists approved of Mr. Tait's procedure and appreciated his work. Mr. Tait only shared the difficulty which any man met with who brought out anything new. He had himself been accused of being a quack because he had introduced new methods of treatment. Mr. Tait, he said, had confused the opposition to the removal of the uterine appendages with that which had been expressed by many to their removal for pyosalpinx. Many had opposed their removal for the latter disease, though he himself had not. Dr. Playfair asked what were the indications for removing the appendages in uterine myoma? Why had Mr. Tait removed them in the patient who appeared healthy? He had himself known a case in which a woman had a large uterine myoma which reached to the ensiform cartilage. The woman was a monthly nurse, and had had it twenty-eight years. He had known her for twenty-five years. She suffered nothing from its presence, and the only objection to it was that everyone supposed her to be pregnant.

Dr. Imlach said that no surgeon was less fond of surgery than Dr. Keith. All the cases recorded by Dr. Keith were stated by that surgeon to have been known by him for years. He wished Dr. Keith had had the courage to operate sooner. He quite agreed with Mr. Tait as to the justifiability of the operation.

Dr. Edis also supported Mr. Tait. He said it had been denied that in these cases patients ever died from hemorrhage. *But they did;* he had seen it. Many doctors said we should wait for the menopause. He had known a case in which a patient had waited for the menopause until the mature age of fifty-six years, and there were then no signs of it. Had this patient been operated on sooner, ten years of enjoyment might have been added to her life. Referring to a specimen exhibited by Dr. Walter (of a uterine myoma removed by hysterectomy), he said we should never see such specimens. The patient should be operated on sooner, when the milder operation would suffice.

Mr. Tait, in reply, again referred to the opposition his views had met with. At the International Medical Congress held in London, August, 1881, he had been decried by London physicians. Dr. Priestley had accused him of wanting to operate for the sake of the fee for the operation. He might as well accuse London physicians of wishing not to operate for the sake of keeping the patient in hand, and going on taking fees for attendance, so that objection answered itself. As to pyosalpinx, he now regarded it as settled, and beyond the reach of argument. There were doubtful cases to be discussed. But in "reflex cases" he hedged himself about with so many conditions as almost to preclude him from operating. He could count on his fingers, almost on those of one hand, the cases in which he had operated without pelvic disease, and he could defend even these. As to whether his diagnosis was always correct he said that the fact of the patients coming to him was a proof that they had been dealt with before. Almost all the patients who came to him had been sent to him by practitioners, and came to him with a diagnosis already made. It has been objected that the operation produced sterility. But, he asked, how could a woman with such a tumor as that shown by Dr. Walter bring a child into the world? The tumor completely filled the pelvis. Another argument was that you unsexed a woman and deprived her from the enjoyment of sexual gratification. This had been shown to be incorrect. These two were merely windbag arguments, and only wanted pricking to make them collapse. Replying to Dr. Playfair, he said he operated in the case in question because of the exceedingly rapid rate of growth of the tumor.

Friday, July 31st—Third Day.

Dr. Gervis, in the Chair.

Dr. Berry Hart, of Edinburgh, read a paper on

THE MECHANISM AND MANAGEMENT OF THE THIRD STAGE OF LABOR.

The oxyhydrogen light was used in illustration of this paper, the meeting being changed for the purpose to a room which could be darkened. Numerous micro-photographs were enlarged and thrown on the screen by means of the oxyhydrogen light and suitable lenses. Some microscopic sections were shown in the same way. Having shown the micro-photographs, etc., the shutters were opened and Dr. Hart then read his paper. The entire expulsion of the membranes was, he said, of great importance. We had obtained a good deal of knowledge through the attention which was now paid to abdominal palpation. After discussing at some length the structure of the uterine mucous membrane and of the decidua, Dr. Hart discussed the mode of expulsion of the placenta. It was, he said, expelled by uterine retraction and expression. There was little to shake Duncan's view that it was expelled edgeways in ordinary cases. But this mechanism was easily disturbed by adhesions and the fœtal surface made to present. The placenta and membranes were not expelled normally till twenty or thirty minutes after birth. The practical points to remember were that the placenta and membranes were not expelled for some time after birth, that they were expelled by contraction of the uterus, that expulsion took place edgeways, and that normally there was no entry of air. Dr. Hart recommended that, after the birth of the child, the mother should be placed in the dorsal position. The uterus might be grasped to maintain contraction, but Crédé's method of expulsion should not be applied too soon, as the placenta alone might thus be expelled, leaving the membranes behind. It should not be used in less than half an hour, and then only with the left hand. He approved of the employment of a douche containing corrosive sublimate (1 in 4,000).

Dr. Gervis said the dorsal position was important after the birth of the child. It was not a question of twenty minutes or thirty minutes, but we should not express the placenta at once by Crédé's method. The application of *pressure* to the uterus was, however, a good plan both before and after birth. He always instructed

the nurse to press on the fundus. Antiseptics tended to prevent hemorrhage.

Dr. STEEL, Senior Vice-President, then took the Chair in place of Dr. Gervis, who was obliged to leave for London.

A paper by Dr. BRAXTON HICKS was then read by one of the secretaries in Dr. Hicks' absence. The paper was entitled, "On a Condition of the Inner Surface of the Uterus, after the Delivery of the Child, of Practical Importance." In his paper, Dr. Hicks stated that after delivery the inner surface of the uterus was, of course, considerably reduced in area by the contraction of the uterus. If the lining membrane were correspondingly reduced, the surface would be level; if not, it would be thrown into folds. He was not aware that the latter condition had ever been described. He had observed it and now drew attention to it. The importance of this state of the uterine mucous membrane was that it might be mistaken for a tumor or some other condition.

DR. FREELAND BARBOUR, of Edinburgh, then read a paper on "The Anatomy of the Placental Site with reference to the Third Stage of Labor," and exhibited a number of specimens illustrating his paper.

MR. G. PADLEY then read a paper on "A Case of Acute Abscess of the Unimpregnated Ovary, with Recovery by Absorption."

DR. D. A. DAVIES read a paper entitled "Short Notes of a Case of Chronic Inversion of the Uterus."

THE ACADEMY OF MEDICINE OF PARIS.

Stated Meeting, June 30, 1885.

M. BERGERON, PRESIDENT, IN THE CHAIR.

(Special Report for THE MEDICAL RECORD.)

THE Academy being called to order, M. LUYS presented

A PLASTER MODEL OF THE HUMAN BRAIN,

which had been designed by Dr. Descourtis. It was an exact reproduction of a natural brain, enlarged about four times, and measured 25½ inches in the antero-posterior diameter and 15½ inches in a vertical diameter. The speaker stated that this was the only model of the kind in France, the plaster brain made under the direction of Broca, and now in the museum of the Anthropological Society, not being an exact model of a natural brain, but rather a representation of what the ideal brain should be.

M. GAVOY presented a model of

AN IMPROVED STETHOSCOPE

furnished with a hollow chamber which served to intensify the natural sounds before they reached the ear.

DR. NICAISE then read a paper upon

RICE-GRAIN HYGROMA OF THE THIGH.

He related three cases which had recently come under his observation, in which he had removed cysts, containing rice-like granules which microscopical observation showed to be tuberculous. Some rabbits inoculated with scrapings from the walls of the cysts, or with portions of the rice-grain bodies, presented evidences of tubercular infection, though they had not yet been subjected to a conclusive examination. In one of the cases the inflammatory tubercular process had given rise to the exudation of a fibrinous mass, weighing nearly twelve and a half ounces, without serum or pus. This fact would seem to show that there was a special form of

TUBERCULAR INFLAMMATION OF SEROUS MEMBRANE,

not leading to cellular proliferation or transudation of white corpuscles, but to the formation of a large quantity of fibrinous material. The speaker also reported a case of fungous arthritis of the knee, in which there was, at the same time, a soft semi-fluctuating swelling in the immediate neighborhood of the articulation. This was opened, and M. Nicaise was surprised to find, instead of suppurating fungous proliferations, a reddish, translucent, dry, fibrinous mass, completely filling a cavity whose wall was infiltrated with tubercular growths. The author asked whether these forms of hygroma and synovitis, in which the rice-grain bodies were found, were always tubercular in their nature. He thought it was a question which could not be answered without further study, and the knowledge derived from more extended observation.

M. CONSTANTIN PAUL then made a report upon

AN ELASTIC RESPIRATOR,

devised by Dr. Basil Féris for use in the treatment of pulmonary emphysema. The apparatus was something like an elastic truss for double inguinal hernia, but with the pads pressing in a reversed direction. It was applied in such a way that the pads rested in the second intercostal spaces at the level of the union of the ribs with the costal cartilages. Dr. Féris had used the respirator in nearly thirty cases of emphysema, and in only two did it fail to give more or less relief. The reporter regarded the apparatus very favorably, and thought it very useful in remedying the want of tone in the respiratory muscles. The muscles of inspiration were not fatigued by this compression if it were only equivalent to, and not greater than, the normal tonicity of the expiratory muscles. The respirator was useful in habitual dyspnœa, even of considerable intensity, and failed only in cases in which the difficulty in breathing was excessive, as in certain attacks of spasmodic asthma.

The speaker read a second report upon a memoir entitled

BILIARY LITHIASIS AND ITS SYMPTOMS,

by Dr. Merle. The author maintained that it was frequently impossible to conclude as to the existence of biliary lithiasis from the general symptoms, and that certainty in diagnosis could be obtained only by the discovery of the biliary concretions in the fæces. Individuals suffering from this condition, he asserted, were subject to attacks of intense colic followed by diarrhœa, and if the stools were examined they would be found to become more and more liquid and to contain a constantly increasing amount of biliary gravel. The latter might be more readily detected if warm water were added to the stool, as the fecal matters would rise to the surface, while the gravel would sink to the bottom and could be found by decanting the upper layer of fluid. The author had based his conclusions upon a very small number of cases, but the reporter regarded them as worthy of attention, and advised that Dr. Merle pursue his investigations further, with a view of strengthening his previous observations.

Finally, M. PAUL presented to the Society, in the name of the author, the second edition of

LESSONS ON MINERAL WATERS AND HYDROTHERAPEUTICS,

by M. Durand-Fardel.

The Academy then went into executive session.

THE LAICIZATION OF THE HÔPITAL COCHIN.—The Paris authorities recently voted to laicize the Hôpital Cochin, one of the few institutions of the kind still under the charge of the sisters. But they have met with an obstacle which may bar their further progress. In examining the records it was ascertained that according to the terms of endowment there was a stipulation that the hospital should always be under the care of the sisters of charity, under penalty of forfeiture of the land and money to the original heirs. There are said to be many of the latter in Paris who are only waiting for the execution of the decree to bring suit for the property.

Correspondence.

OUR CARDIFF LETTER.

(From our Special Correspondent.)

(Continued from p. 223.)

CARDIFF, SOUTH WALES, August 2, 1885.

THE other general meetings were fairly well attended. I need not refer to the general addresses, as your readers will have had the opportunity of forming their own judgment on them long before you receive this—in fact, before it is posted here. Suffice it to say that they were numerously attended and well received. The work of the sections is described to your readers in separate reports. I subjoin a few notes about the museum.

The annual museum has of late years been quite a feature at the annual gathering. The rule is that the objects shown must be genuine novelties. This rule is not very rigidly interpreted, the consequence being that many of the exhibits are by no means novel. As at larger and more pretentious exhibitions, there is also an unmistakable commercial air about some of the stalls. The exhibitors, in fact, take a stall and exhibit for the sake of the advertisement. It pays them. The commercial aspect is sometimes a little too much to the front, though I think in this respect Cardiff has been better than some former meetings. Still, in spite of these slight drawbacks, the museum is always worth a visit. I will briefly mention some of the exhibits which struck me as noteworthy.

Messrs. R. & J. Beck showed some very cheap microscopes, nickel-plated, on a solid stand, and with a one-inch and one-fourth inch objective, for a very moderate sum. For a little extra, a one-sixth inch objective was included. The same firm showed several specimens of micro-organisms under various powers, viz., bacilli anthracis, spirillum of relapsing fever, bacilli tuberculosis, and comma bacilli. A new microtome was also shown, but as the cost is fifteen guineas, it is not likely to be purchased except for special work.

Mr. Immisch exhibited a very neat metallic thermometer, resembling a watch very much in appearance, having a transparent face, and a hand which indicated the temperature. It was not self-registering, but as it took thirty seconds for the index to return to the starting-point, the reading could easily be taken. A very handy surface thermometer was shown by Messrs. Mayer & Meltzer.

A convenient ether-freezing microtome was shown by Dr. R. A. Hayes, of Dublin.

Mr. Jahncke exhibited his very convenient nickel-plated pocket urine-test case, also a pocket hypodermic case, and patent boxes of similar construction for carrying bottles.

Messrs. Millikin & Down exhibited, among many other instruments, Mr. Golding-Bird's tracheal dilator, made on the principle of the nasal speculum. This was, strictly speaking, not a novelty, having been introduced some few years since, but I think it was new to many present.

Messrs. Essinger exhibited Hartmann's patent wood wool, wood wool wadding, and hygienic wood wool diapers.

Messrs. Krohne & Sesemann had on view Kabiersky's powder-blower, for the application of powdered medicaments for the antiseptic treatment of wounds, diseases of the throat, nose, ear, eye, etc.

Several anæsthetic appliances designed by Dr. R. T. Freeman were shown by Mr. J. F. Blennerhasset, of London.

A more complete series of Dr. Oliver's urinary test papers was shown, also Dr. Pavy's test-pellets for sugar in the urine.

Models were on view of Morrell's Patent Combined House-ashes and Earth-closet System.

Withington's Patent Sewer-gas Excluder was a rather curious piece of mechanism. It consisted of a solid plug so arranged as to act as an obturator in the soil-pipe when the closet was not in use. When the closet was flushed with water the plug moved to one side. The exhibitor seemed to think it was quite as good as, or even better than, a good ventilating pipe in excluding sewer-air.

I noticed an exhibit of the Buffalo Natural Lithia Springs. Messrs. Burroughs, Wellcome & Co. had a large stall of pharmaceutical exhibits, as also had Messrs. Allen, Hanburys & Co.

A large and interesting stall was that devoted to Jaeger's patent clothing. Dr. Jaeger appears to be an enthusiast. He has persuaded himself that it is his mission to press on the public the desirability of clothing themselves from head to foot in products derived solely from the animal kingdom. Vegetable fabrics are to be discarded. A large box of camel-hair was presented to every visitor to the stall who would take it, and also a well-bound volume, of nearly two hundred pages, describing the system and enforcing its value and importance.

A separate room was devoted to anatomical and pathological preparations. Among these were some sagittal mesian sections of the female pelvis (frozen), sagittal lateral sections of female pelvis, and axial coronal sections of female pelvis, showing the relations of the ureters to the vagina and cervix uteri. These were exhibited by Dr. D. Berry Hart, of Edinburgh, one of the Secretaries of the Obstetrical Section.

I must now bring this letter to a close. You have already learned that the 1886 meeting is to be held at Brighton. Dr. Withers Moore is the president-elect. It is rather early to prophesy as to the next meeting, but I think it is likely to be more largely attended than any meeting of recent years. Brighton is of easy access from all parts of the south coast, and is but little more than an hour's run by rail from London, where alone we have over nine hundred members in the Metropolitan Counties Branch of the Association.

THE CARDIFF MEETING—ANOTHER ACCOUNT.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR: All those who attended the Cardiff meeting must admit that it was one of the most pleasant and also one of the most successful of those held within the last few years. Such at least is the general impression amongst those who have recently returned to town from the meeting in South Wales. Wales is noted for its hospitality, and on this occasion the festivities provided by the liberality of the local worthies did much to enliven the scientific proceedings. Not that a certain number of entertainments is not the custom at the annual meetings. A certain amount of amusement is always blended with the scientific repast provided, and of late years this has tended to preponderate. So much so, indeed, that some wicked people whisper that many members attend the annual meeting mainly for the sake of the fêtes. However this may be, I think those who attended the President's reception in the Park Hall on the Wednesday evening, and danced till two in the morning, were not very likely to arise early and put the finishing touches to the papers they were to read. I much fear, also, that several members of the Council were late at the Council meeting, held at half-past nine on the following morning. Strolling along the banks of the canal by the light of many-colored Chinese lanterns, and listening to the distant strains of the Hungarian band, or turning in the giddy mazes of the waltz, was rather calculated to take the edge off the zest for scientific inquiry which the members of the British Medical Association are supposed to possess.

Some scientific instruments and a few microscopic objects were shown up-stairs, but even the latter were of more popular than medical interest. This was doubtless

in deference to the presence of ladies, for the fair sex are admitted to the entertainment. They are, too, not confined to the medical element, but invitations were freely scattered among all the local magnates. Both on Wednesday and at the Mayor's reception on Friday, the ball-room proved the chief centre of attraction. On the latter occasion the revellers did not depart till daybreak. About fifteen hundred were present each time.

The dinner passed off without any very striking incident, except that one gentleman fell off his chair by sitting down on it too near the edge. This raised a laugh at his expense in his immediate neighborhood. Some remark was caused by the President giving the signal for "lighting up" by making the customary remark that the duty was taken off tobacco immediately after the Queen's health had been drunk, instead of, as is generally done at public dinners, waiting till the Prince of Wales' had also been drunk. Mr. Wheelhouse, in proposing the Army, Navy, and Auxiliary Forces, did not at first observe that a naval officer was present to respond for the Navy, but he afterward repaired the omission. The High Sheriff of Glamorganshire, Colonel Hill, caused immense laughter by stating that he had, when he first learnt that the Association was to meet at Cardiff, turned to the "Encyclopædia Britannica" to learn something of the origin of surgery. He had there, he said, found it traced back to the Egyptians, and the origin of bleeding credited to the hippopotamus. That animal, it was said, when depressed, was accustomed to bleed itself by running its leg against a stump. Professor Lucae, of Berlin, was amongst the visitors present, and, in proposing "The Guests," Dr. Wilks coupled his name with that of Dr. Duncan Bulkley, of New York.

Lest your readers should imagine that all play and no work was the order of the week, I will now refer to some of the work done. Two important discussions took place in the Section of Medicine, viz., on "Acute Rheumatism" and "Glycosuria," respectively. Dr. Bristowe introduced the former, and surprised those who only knew him as the author of a very learned but rather heavy text-book, by the ease with which be spoke and the point and interest he imparted to his address. Dr. Bristowe, indeed, made an excellent speech. Dr. Pavy introduced the discussion on "Glycosuria," but the length of his address was rather wearisome. Readers of papers are limited to fifteen minutes, but this rule does not apply to those who introduce discussions. Dr. Pavy much exceeded it, and consequently left but little time for subsequent speakers. Dr. Pavy was again to the front on the following morning, when he occupied nearly an hour in reading his paper on "Cyclic Albuminuria." He brought forward a number of interesting points, but he has not the advantage of being a good speaker, and it was scarcely fair to exceed the time allowed for papers to so great an extent as he did. He actually occupied a good deal of time in reading various letters from patients and their doctors. This involved a good deal of repetition. Dr. Pavy is one of our ablest London physicians, and what he says is always to be listened to with respect, but I cannot help thinking that he might have considerably shortened his paper with advantage. Much of it was so elementary that it was only suitable for a clinical lecture. Dr. Wilks, the President of the Section, was placed in rather an awkward position. Being Dr. Pavy's colleague at Guy's Hospital, he, no doubt, scarcely liked to "shut him up" in fifteen minutes.

What I have said about the set discussions, applies equally to other Sections. Thus in the Section of Pharmacology and Therapeutics, the last morning (two hours) was allotted for the discussion on "Anæsthesia." A paper on another subject was also put down to be read. Dr. Dudley Buxton, of University College Hospital, introduced the discussion, and took an hour and a quarter to do so. As he read every word, and has not a particularly good delivery—rather the reverse—it is not surprising that many of "the practical men," whose opinions he said he wished to elicit, took up their hats and departed after patiently listening for some time. Dr. Buxton occupied another quarter of an hour in his reply, thus making an hour and a half altogether. His paper was not by any means devoid of interest, but it would have been much better received had it been shorter. The discussion was very freely joined in by those present, though the time was much abridged by the lengthy introduction. I am disposed to think that there is a good deal of reason in what I have heard stated, anent the Cardiff meeting, viz., that a man who cannot say his say in half an hour had better write his paper out and send it to the *Journal*, and not pretend to join in a discussion, at any rate where the time is so limited. On the present occasion, a good deal of time was occupied by the reading (by the Secretary) of a communication from Professor Cheyne, of Edinburgh. Professor Cheyne had promised to take part in the discussion, but being unable, printed his contribution in pamphlet form and sent a number of copies for distribution. As each gentleman present had thus before him a printed copy, it was surely unnecessary to occupy the time by reading it aloud, also especially as a larger portion of it had appeared in a medical journal about a year ago. Professor Fraser, however, ruled that it should be read and read it was.

The Surgical Section was scarcely as successful as last year. The two discussions went off well. Those who were anxious to hear Mr. Lawson Tait's views on Intestinal Obstruction were disappointed, as that gentleman did not turn up at the appointed time, being presumably engaged in the Obstetrical Section. Putting aside the two special discussions, I scarcely think the papers read were (taken as a whole) of equal interest to those of last year.

The Obstetric Section was very well attended. An animated discussion took place on "Antiseptic Midwifery." Dr. Clifford Allbutt, too, received a good mauling. Perhaps it was as well he was not present in person to respond, or the discussion might have become still more personal than it did. Dr. Berry Hart made rather a good show by exhibiting about twenty or thirty micro-photographs by means of the oxy-hydrogen light. The photographs were enlarged and thrown on a screen, the room being darkened for the purpose. The display would have been more instructive had Dr. Berry Hart read his paper first and then showed the specimens. As it was, some of them were rather difficult to understand. Each one appeared for only a few seconds and was then quickly succeeded by another, Dr. Hart adding a few words of explanation. He afterward read his paper, which was rather difficult to follow, as he read very quickly, and his enunciation was not very distinct.

Otology was apparently not very popular, as I understand all the otological business was got through within one afternoon. Ophthalmology attracted more votaries, the presence of some distinguished foreign ophthalmic surgeons proving an attraction.

I need not pursue in detail the work of the Sections, as you already have special reports of them.

Medical practice in Cardiff and South Wales generally is, I am informed, highly remunerative. This is fortunate, as the expenses of the late meeting have been heavy, and a considerable proportion of them will fall on the local Branches of the Association. I was told that the Conversazione given by the President and Reception Committee would alone cost five hundred pounds. In the colliery districts of Wales, I understand, many of the colliery surgeons make very large incomes. It is, it appears, a sort of rule for all the colliers to pay the colliery surgeon so much weekly in proportion to their earnings. Three pence in the pound was mentioned as a usual sum. Where wages are good and many men employed, it will readily be understood that this may pay very well. One surgeon frequently has several collieries, and employs many assistants. I heard of one who employed twenty,

and was surgeon to collieries in two different valleys. Many colliery surgeons are said to make thousands of pounds a year, and I even heard a story of one who lived quite in the country among the hills, and made fifteen thousand pounds a year, though the latter sum sounds rather apocryphal.

I will conclude by relating a story I heard while in Wales: A certain doctor in a certain district was noted as being a very absent-minded man. He was sent for one day to visit the wife of a banker. On arriving, he walked into the drawing-room, took no notice of the lady, but walked straight to the mantelpiece, and, resting his elbow on it, leaned his head on his hand and sighed deeply two or three times. He then went away without speaking to his patient. He had, in fact, not thought about her, being engrossed in thought about another one. She, however, thought otherwise. Her husband came in presently, and she asked him what the doctor had said. She knew, she said, that the doctor thought she would die, only he did not like to say so. In vain the husband protested that he had not even seen the doctor. The latter was finally recalled, and asked for his opinion. He then said he could not say what illness the lady was going to have, but she was to go to bed and stay there until he called again. He did not call again for six months. This was gravely related to me as a *bona fide* occurrence. I am not prepared to vouch for its accuracy, but the narrator told me it was perfectly true and well known. Absent-mindedness is, of course, not found only in Wales.

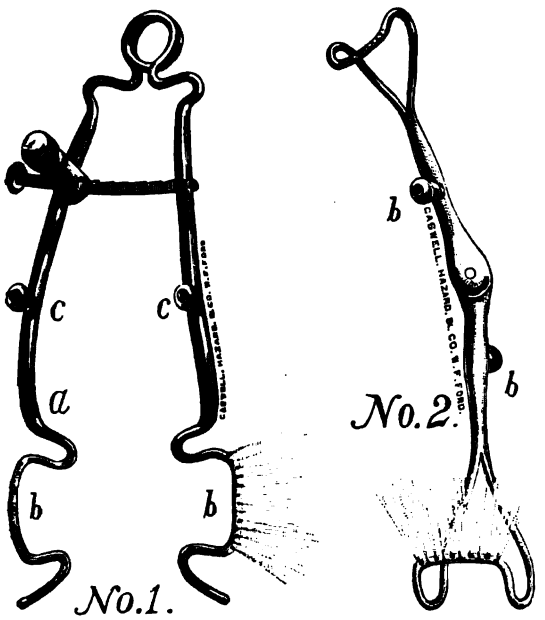
New Instruments.

A NEW INSTRUMENT FOR WASHING THE UPPER CUL-DE-SAC OF THE CONJUNCTIVA.

By JOSEPH A. ANDREWS, M.D.,

OPHTHALMIC SURGEON TO CHARITY HOSPITAL, NEW YORK, ETC.

In purulent conjunctivitis the first and most important indication is to wash away the infective material as early and as thoroughly as possible.



A thorough cleansing of the upper cul-de-sac is not possible by the ordinary means. The instrument pictured above is designed to secure the fulfilment of this important indication. Figure 1 is an eye-speculum, the arms, *a*, of which are hollow, and the claw, *b*, is deeper than in the ordinary eye-speculum. The claw has a number of perforations through which the water is injected into the upper cul-de-sac. At *c* a fine rubber tube is attached and connected with a fountain syringe.

The instrument requires to be introduced between the eyelids with great gentleness, and care should be taken to avoid injuring the cornea with the instrument. The eyelids should then be gently lifted from the eyeball and the spray of fluid allowed to play upon the upper cul-de-sac.

Figure 2 represents a folding lid-elevator (large and small size) designed for the same purpose as the eye-speculum. The arm is also hollow, and the perforations are in the claw. The tube of the fountain syringe is attached at *b*.

An ordinary syringe has been used to wash the eye in purulent conjunctivitis, but its use should be seriously deprecated, because it never fulfils its purpose; moreover, in driving the piston-rod home, the nozzle of the instrument being between the eyelids, the eyeball is very likely to be injured, and the fluid is invariably injected all over the patient's face, and the operator does not escape it.

These instruments are manufactured by Mr. W. F. Ford, of Messrs. Caswell, Hazard & Co., of New York.

40 West Twenty-fourth Street.

Army and Navy News.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from August 16, 1885, to August 22, 1885.

Wolverton, W. D., Major and Surgeon. Granted leave of absence for twenty days. (Washington Barracks, D. C.) S. O. 171, Department of the East, August 14, 1885.

Maus, L. M., Captain and Assistant Surgeon. In addition to his other duties, assigned to duty as attending surgeon of the Department Rifle Camp. S. O. 83, Department of Dakota, August 3, 1885.

Black, C. S., First Lieutenant and Assistant Surgeon. Upon return of Troops F and L, Third Cavalry, to Fort Davis, Tex., to rejoin his proper station, Fort Clark, Tex. S. O. 98, Department of Texas, August 13, 1885.

McCaw, W. D., First Lieutenant and Assistant Surgeon. Having reported back at these headquarters from detached service, ordered to rejoin his proper station, Fort Lyon, Col. S. O. 122, Department of the Missouri, August 17, 1885.

Official List of Changes in the Medical Corps of the U. S. Navy for the week ending August 22, 1885.

Drennan, M. C., Surgeon. To temporary duty at Annapolis, Md., as member of Board for Physical Examination of Candidates for Admission to the U. S. Naval Academy.

Simon, William J., Surgeon. To temporary duty at Annapolis, Md., as member of Board for Physical Examination of Candidates for Admission to the U. S. Naval Academy.

Medical Items.

Contagious Diseases—Weekly Statement.—Report of cases and deaths from contagious diseases reported to the Sanitary Bureau, Health Department, for the week ending August 22, 1885:

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-spinal Meningitis.	Measles.	Diphtheria.	Small-pox.	Yellow Fever.
Cases.								
Aug. 22, 1885.....	1	22	15	1	19	27	0	1
Deaths.								
Aug. 22, 1885.....	0	6	2	1	3	13	0	1

A Visit to the Clinic of Professor Gussenbauer in Prague.—Professor Gussenbauer is the presumptive successor of Professor Billroth, whose assistant he has been for many years; he is a very able and remarkable surgeon, and one of the best teachers of the age. He is about forty years of age and occupies the chair of surgery in this most ancient and celebrated University of Prague. For five years he filled the same chair in the University of Liege, and taught in French. The Government wanted to confer honorific titles and medals on him, which he declined, and asked instead to create places for surgical pupils (operations Zoeglinge) at the clinic of Prague. The surgical amphitheatre is a magnificent room, quite new and of huge proportions, admirably adapted both for lectures and operations. It is lighted from a glass ceiling and lateral windows. First the outdoor patients are attended to, then the house patients are brought in on stretchers. Two or three medical students are called up to make a diagnosis. The history of the case is then given and the proposed plan of operation is stated and explained. A man seventy years of age is brought in, with a cavernous angioma of the left ischio-rectal fossa. He only uses a bistoury; a dissection of insurmountable difficulty for a less skilful operator, lasts not less than an hour. The tumor of the size of two fists is formed of two distinct parts, the inferior half has the character of an angioma, the upper half that of a sarcoma. The ischio-rectal fossa is tamponed with iodoform gauze. Then came a resection of the elbow, for fungous arthritis; then a case of ablation of intramuscular lipoma of the neck; then an amputation of a leg. Esmarch bandage is applied. One of the "operations Zoeglinge" performs the operation under the eyes of the professor. He has to detach and turn back the periosteum before applying the saw, etc., etc. He averages five operations a day before his class, from 10 A. M. to 12 M. Antiseptic precautions are minutely carried out. For many years he used phenic acid, of late, the corrosive sublimate, 1 to 500, is his remedy, he plunges his hands in repeatedly during the operation; ligatures are soaked in the corrosive sublimate solution, but instruments in that of phenic acid. He is ably assisted by his internes and by the "operations Zoeglinge." Traumatic fever is unknown at his clinic, doubtless due to the strict antisepsis.—*Prog. Med., St. Louis Journal of Medicine and Surgery.*

The Modest View of Specialism.—When the worst has been said against specialism, it still remains as a system of work which, if narrow and comparatively humble in its aim, is practically more successful in attaining it than broader and more philosophical methods. The final test of every institution as of every individual in these days is the record of actual achievement which it has to show. Judged by the standard of results, whether in the shape of additions to the store of scientific truths or to the armory of weapons against disease, specialism has nothing to fear. Even its enemies must admit that it is to it that the vast strides which the art of healing has taken in late years are mainly due, and there can be no doubt that medicine can only continue to advance by a process of specialization becoming more and more minute. In the eyes of *idéquologues* whose breadth of view rather impairs the keenness of their vision of things close at hand, the specialist no doubt may appear a somewhat unheroic figure beside his larger-minded brethren. Practical men, however, consider less the intrinsic nobility of the work than the efficiency with which it is done.—*Dr. Morell Mackenzie.*

The Bees and Apollo: a Medico-Pharmaceutical Fable.—Once upon a time the busy bees were gathering honey from a flowery field on famed Hymettus. Suddenly one bee was heard to buzz much more loudly than the rest of his companions, who, upon listening, heard that he had found a new process for extracting a superior honey of remarkable medical properties. He had also, at the same time, invented a very ingenious way by which he could with comparative ease make his buzz sound four times as loud as that of the ordinary bee. By means of these inventions, he soon disposed of large quantities of honey at a high price. But one day, Apollo, who was experienced in the matter of honey and its medical properties, came that way, seeking some good sample for the use of his friend Diana, who was a little ill. He looked at the new preparation, which was put up in soft capsules and called "honeyine," and at another kind which was put up in chocolate tablets and called "honey-idea." He also listened to the new buzz. "I think," he said finally, "that the buzz is much more wonderful and effective than the honey; I will take it to Diana, who is fond of buzzing." Some days later, Æsop, on hearing this story, remarked that the moral which he would add was, that the art of advertising a new medicinal preparation is of more importance than the art of making it.—*Boston Medical and Surgical Journal.*

Bullet-wounds of the Heart.—Dr. T. H. Brannan, of Canal Dover, O., referring to the fact that "the experience of experts with shot-gun wounds of the heart is limited," reports a case in point. About 4 A.M. June 17th, a miner was shot. "He turned immediately around, and walked seventy-seven paces in the direction of his house, climbed over a board fence, three boards high (the fourth and top board being gone), proceeded two hundred paces farther to the front gate of his residence and there fell. From here he was carried into the house, propped up in bed, and at the end of thirty minutes passed into a convulsive tremor of short duration, at the end of which he was dead. He was rational to the last, and conversed up to the moment of his death. At the autopsy five hours later a No. 2 shot was taken from the calf of his right leg; one from the left wrist; while the third and fatal one entered the chest in the third intercostal space of the left side, one inch above, and two and one-half inches inward, from and on a line drawn from the left to the right nipple. From this point the shot passed backward and to the right, passing through in its course and in their order both walls of the pericardium, the base of the pulmonary artery, the left auricle, the inner border of the lung, and impinging upon the right side of the body of the fourth dorsal vertebra, at which point it glanced off and was lost in the body. The pericardium was found distended with coagulated blood, and the pleural cavity contained a smaller quantity.

Pityriasis Versicolor.—This discoloration of the skin is occasioned by the presence in the epidermal layers of a parasite known as the *mycrosporon furfur*, and is often cured by the external use of sulphur in the form of daily baths and frictions with the ointment. An ointment consisting of 20 drops of nitric acid in 1½ ounce of lard is also said to be efficacious. Another remedy which has been used successfully is a lotion of corrosive sublimate of the strength of 1 part to 1,000.

Extract of Male Fern.—Krämer recommends as possessing very active properties an extract prepared in the following manner. The rhizome is gathered in May and October, is scraped and divided into small fragments and exhausted, while still fresh, in ether containing a very small proportion of alcohol. The ethereal tincture thus prepared is kept in closely stoppered flasks in a cool place. When wanted for use a sufficient quantity is evaporated to the proper consistence, and the extract is obtained.

The Raillière Springs at Cauterets.—A report has been going the rounds of the French press to the effect that the Raillière establishment in Cauterets had been nearly destroyed by a storm, and that the composition of its spring had been materially modified. This report is now contradicted by Dr. Bouyer, the medical inspector of Cauterets, who affirms that it is a malicious fabrication originating in a rival establishment, jealous of the increasing popularity of this thermal station.

The Medical Record

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Original Articles.

COUGH.

BY J. MILNER FOTHERGILL, M.D. EDIN., HON. M.D. RUSH MED. COLL., ILL.,

PHYSICIAN TO THE CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST (VICTORIA PARK).

IN this day of careful physical examination of the thorax some other matters have almost dropped out of sight. The old physician who recently declined the loan of a stethoscope by a young clinical assistant for the diagnosis of pneumonia, saying, "Thank you, young man; but I think I can detect pneumonia without a stethoscope!" could no doubt have taught that youth much that would be useful to him. A stethoscope is a capital instrument in the hands of a man who knows its use; but it has undoubtedly drawn attention away from what may be termed rational consideration of the chest, and a judicial handling of what the patient has to tell, which often furnishes a clew to the treatment; a matter on which sometimes the stethoscope is silent. It is not that physical examination is not a most valuable means of acquiring certain information; but that this other information is apt to be overlooked or underestimated; and thus a good proportion betwixt the two means of examination is lacking.

A cough is a forced expiration to eject some offending material from the air-tubes, just as a sneeze clears the nares. But suppose the offending or irritant matter cannot be ejected, what then is the value of the cough? Nothing whatever. There is, then, much useless cough, as well as useful cough. Other matters than something in the air-tubes may set up a cough. Thus we find cough equally present when there is some phlegm in the air-tubes; when there is a mass of tubercle undergoing softening; and in the pulmonary congestion of a mitral lesion. A crumb in the larynx will provoke violent cough; and so will other laryngeal irritation. All know the brazen trumpet-like cough of aneurism of the aortic arch pressing upon the recurrent laryngeal nerve, a cough closely simulated in character at times by a neurosal cough. This last was so marked in two girls that their cough told when they were on the hospital premises. It is needless to say their departure was always expedited. Then, cough in the form of "hawking" is exceedingly common in pharyngeal disturbance.

There is, too, cough unconnected with the air-passages and the respiratory organs. There is the well-known cough of pregnancy, the "nine months' cough." There is ear-cough, said to be connected with the tympanic branch of the glosso pharyngeal nerves, which is set up by irritation in the ear. There is the cough of gastric irritation, common with alcoholic indulgence. In one case, at least, known to me, diarrhœa always set up cough. Cough of the "hemming" character, often misinterpreted as the short cough of early phthisis, is found commonly in girls at or after puberty, linked with ovarian or spinal irritation. It is clear, then, that cough has various causal associations.

The importance of reflex cough need not be considered here; nor yet the means by which it may be relieved. In all reflex actions the bromides suggest themselves at once. If the exciting cause can be dealt with, then the resultant cough is relieved.

It is rather the intention here to consider cough from its clinical and therapeutic point of view, and to see what indications it furnishes us for treatment. For instance, in "heart cough," *i.e.*, where the cough—a hard, dry cough—is set up by congestion of the pulmonic or lesser circulation by some dam or block at the mitral ostium, sedatives are most undesirable.

Such cough is most commonly found in a young girl with a mitral lesion. One such case I well remember when the resident medical officer of the Leeds Public Dispensary. The girl, a child of twelve, had mitral regurgitation—an injury inflicted upon her previous to her coming under my notice. Digitalis and iron improved the general condition, and with it the amount of cough; but still the child, a bright neurosal creature, coughed considerably. She ceased to attend, but some weeks later her mother came and made a frank confession to this effect: "Doctor, I thought the girl ought to have some cough medicine, and when I asked you for it, you always refused to give her any. One day I came when I knew you would be out, and got one of your assistants to grant me some cough stuff. It acted like a charm; but she soon fell off and lost her appetite, and could not get about; and now there is dropsy in her ankles. She is so bad, I want you to do what you can for her." Appropriate treatment soon restored the child to her ordinary condition; but her mother did not hanker after cough medicine after this experience. This case illustrates vividly the disastrous effects of allaying the cough when due to pulmonary congestion. For a little time it gave relief, but the after-condition was worse than the first. So much for the indication afforded by cough under one set of circumstances, the case just mentioned by no means standing alone.

The consideration of "useful" and "useless" cough may now engage our attention. It is a matter involving the gravest thought, and well deserves our best consideration. We will take cough in bronchial cases first. There is in the early stages of acute bronchitis much useless cough set up by the dry mucous membrane, and the means for its relief have been set forth in a preceding article ("Bronchitis, Acute and Chronic"). Then it was said there existed no particular objection to opium, which gives great relief. But in such case the sedative is combined with other agents of a relaxant character, as tartar emetic or aconite. As soon as free secretion comes the cough changes its character. It is no longer the dry, harsh, shaking cough of ineffectual effort, raising nothing, but becomes the less painful, truly expulsive cough of successful effort. Now, what we are required to do is to give stimulating expectorants, and so help and improve the character of the expulsive cough. There is usually at this point no indication for opium, and none is required unless it be a little at bedtime in certain cases.

It is rather in chronic bronchitis with little expectoration and much bronchial irritation that the question of decision taxes our best mental energies. In some cases the rest at night is broken by irritant cough, and then the question arises of the lesser of two evils. If the opium arrest the secretion, and so render it tougher and more difficult to get up; if the opium brings lethargy to the liver, impairing the appetite, and locking up the bowels, still it gives the patient rest. Consequently it may become necessary to administer it. But it should be given with benzoic acid in compound squill pill, and a little podophyllin or watery extract of aloes to coun-

teract its undesirable effects in the alimentary canal. And by such combination no doubt the maximum of good with the minimum of bad effect can be secured. Numbers of chronic bronchitics under my father's professional care took such a pill every night for years without apparent injury, while it added greatly to their comfort. (I refer to my father's experience in these cases because I served under him and saw his practice, my own experience of general practice being but short.) But granting all this, the less opium in disease of the respiratory organs the better—as a broad rule. Sometimes some chloral, or bromide of ammonium with tincture of hyoscyamus, may seem indicated rather than opium, or even camphor may be the best agent to employ in certain cases. But, in a general way, opium (in such pill-combination as has just been suggested), with some alcohol at bedtime as a "night-cap," *i.e.*, whiskey or brandy and hot water, taken on getting into bed, is the best practice with chronic bronchitics. One great matter there is in such cases, never to be lost sight of by the patient, and that is to avoid passing from a warm sitting-room to a cold bedroom; the bedroom should also be warm. Another is to have the bed warmed by the old-fashioned warming-pan, or, perhaps better still, by a hot-water bottle, which can be pushed down to the foot of the bed (so as to keep the feet warm) when the patient gets into bed. This matter of an equable temperature is very important, and many bronchitics toast themselves well before going upstairs to a cold, unwarmed bedroom, where they cast off their day clothes, don a cold night-shirt or gown, as the case may be, then kneel down and say their prayers, and get into a cold bed. It is needless to say that no medicinal course can be successful in a case where this goes on.

Important as the matter of cough and its indications for treatment are in chronic bronchitis, the matter of cough in chronic pulmonary phthisis is even still more important. There is the cough in the night breaking the sleep, and there is the cough in the day shaking the sufferer; both objectionable and undesirable, and requiring to be dealt with. The circumstances under which cough is developed in pulmonary phthisis vary. Sometimes mere apex consolidation is accompanied by cough. Where there is bronchial implication and localized bronchitis in the affected area this can readily be understood; but at times there is cough without the moist râles indicative of this condition. We are compelled here to suppose some irritation of the pulmonary fibres of the vagus, which is transmitted to the respiratory centre, leading to a discharge producing the modified inspiration and expiration familiar to us as "cough." Belladonna is said to exercise a decided influence over these fibres, and so is indicated in such condition. (By this property belladonna, or atropine, is a desirable addition to an opiate for a night-pill.)

It has also been claimed for gelsemium sempervirens that it is useful in such cough by its action upon the nervous mechanism of the respiration. Bromide of ammonium suggests itself at once for the relief of such cough, from the known utility of the bromides in all reflex trouble.

One curious point there is about cough in its relations to static pulmonary consolidation, and that is this: Whenever a person possessed of a patch of consolidated lung has also the liver upset, then the irritation in the said patch with resultant cough is marked. No cough medicines nor antispasmodics do any good; but agents which act upon the liver, as a blue-pill at bedtime (or other mercurial), and a dose of sulphate of soda next morning, produce a distinct and unmistakable effect in lessening the cough. Consequently, when a patient complains of troublesome cough and an area of consolidated lung is found, it is often well to inspect the tongue and inquire into those subjective sensations experienced when a person is bilious or "liverish." From its known effect upon the liver, opium not only gives no relief, but positively aggravates the condition.

When a tubercular mass, or a portion of the consolidated area commences to soften—probably by the proliferating cells being so crowded on each other that they die; possibly by the appearance of bacilli on the scene—then we can readily understand the oncome of cough, and often severe cough. The dead mass is an irritant—like the thorn of Van Helmont—as a process of ulceration cuts it off from the surrounding lung-tissue; and during the time the process is going on there is distinct local irritation setting up cough. There is, too, hectic fever, with nocturnal pyrexia and night-sweats. In this condition it may become necessary to add some opium or morphia to the mixture of quinine and phosphoric acid so much in vogue for its relief; and whether any sedative must be added or not; and if so, what quantity is a matter to be decided by the merits of each particular case. That some morphia is unavoidable to procure sleep in such condition goes without question; but it must be guarded by the additions suggested in the article on "Pulmonary Phthisis." Such a condition is like a specific fever, or a storm at sea, in that it comes to an end sooner or later, and if the organism can be kept going, or the ship afloat till the end comes, all is well. Of course if there be but one softening patch the irritation set up is smaller than when there are several such morbid areas. In the latter case, opium in the day may be unavoidable; and its drawbacks must be met and got rid of, or neutralized, by such wit and skill as the medical attendant can command, either in himself or in some consultant of more experience or deeper thought. Above all things, keep up the powers by such food as the patient can take. The fever usually brings with it thirst. Then let the patient have cold beef-tea, with baked flour in it; malt extract, with effervescing water; milk, with a mineral water or whey; or milk diluted with water, and some Mellin's food added; and good home-made lemonade, with a fair amount of acid and sugar or malt extract in it. Rice-water, or barley-water, or tamarind-water may be relished. Grapes and the juice of fruit are excellent. Alcohol may, too, be indicated. Sometimes it is neck or nothing. The patient must be heavily dosed with opium to allay the paroxysms of cough; aye, and there is something more than cough, viz., the danger of hemorrhage from a ruptured blood-vessel in the softening area, brought about by the violent effort of cough. The poor patient is like a soldier with the bullets flying over his head; if he escapes one, another hits him. The patient is passing through a period of acute perils; perhaps rather, he is like a canoe shooting rapids studded with rocks; much, very much depends upon the boatman's skill and experience; something upon luck—and the patient's luck is the luck of a good constitution! If the softening areas be numerous or extensive, then the prospects of escape is small, and the skill of the steerer will be gravely taxed. In spite of everything that skill and assiduous attention can do or accomplish, the case may go on from bad to worse unto the inevitable end.

But, in my own experience of phthisis, cough has not been so very prominent a matter as to require treatment in the day, except in a few instances. It is not common for the consumptive to be shaken by racking cough requiring opium in the day. And on inquiring of an experienced sister at the hospital, who has watched the practice of many physicians, including the late Dr. Peacock, she informs me that my personal experience is in harmony with that of other physicians at Victoria Park Hospital. It is at night that cough is prevalent; and the use of opium, in combination with other agents, to procure a good night for the phthisical is a matter upon which there is general agreement.

When there is one or more cavities present, the use of opium is not affected by the fact. Indeed, a cavity is a matter of little moment, either one way or the other, therapeutically. Of course, the patient is no better for having a cavity; but the question is, Is he any worse? Patients with cavities die, certainly; and patients with

cavities leave the hospital very greatly improved by their stay. As to the question of cough and its treatment, a cavity counts for nothing; the cough certainly may be connected with its contents, or perhaps the condition of its wall. But the fact of the patient being in the third stage of phthisis (following the classification of Pollock in his "Elements of Diagnosis in Phthisis") does not affect the treatment.

Finally, in dealing with cough, the physician must observe and reason upon the cause of the cough, what it accomplishes, and how it affects the patient, before proceeding to deal with it. Some cough is useless, because ineffective, and needs some stimulating expectorant to render it efficacious—a very common affair; some cough is useless from every point of view, and so requires a sedative; and here the physician must decide in each case which is the lesser of two evils—the cough, or the sedative.

London, W.

TWO CASES OF EPILEPSY WITH RARE COMPLICATIONS—GRAND AND PETIT MAL WITH SHORT PERIODS OF TRANCE AND VISIONS—HYSTERO-EPILEPSY FOLLOWED BY PROLONGED TRANCE.

By ROBERT H. PORTER, M.D.,

Louisville, Ky.

Ernest B——, aged nine, was brought to my office on the morning of July 5th by his father. In a few moments he had an attack of petit mal that lasted just one minute. His father told me that two months previous his son had been run over by a street car, and in about four weeks afterward he was found sitting on a fence and unconscious. This state of unconsciousness lasted for half an hour. The next day he had several attacks of loss of consciousness, then these attacks became more frequent and at the same time were associated with a slight spasm. Three or four days after the first attack of unconsciousness the spasms changed to mania, which lasted for a week. During this time he was very violent, often attempting to commit suicide and to kill some member of the family.

After the mania subsided the spasms returned in the form of both grand and petit mal. Several days he would have as many as a hundred attacks of petit mal per day; then again they would be less frequent but more severe; often fifteen or twenty attacks of grand mal. Sometimes instead of a spasm he would have a short period of trance, and while in this state he would have a vision of God in Heaven with the Holy Angels, and would see the golden streets of the New Jerusalem. While in this condition he would usually talk all the time telling them of what he saw. After he returned to consciousness he would remember the vision, but did not know that he had been talking about it. Occasionally instead of a spasm or trance he would have a short period of frenzy or epileptic *furor*, in which he would attempt to do violence to himself or some one else. This condition of spasms, trance, and mania had continued for about three weeks preceding his first visit to my office. His father also told me that for three or four years he had been subject to a very severe cough, with frequent hemorrhages, and had been regarded as a consumptive; but for several months preceding his present illness his cough and hemorrhages had entirely subsided, with a corresponding improvement in his physical condition.

In two or three days after coming to see me he was quieted down, and his spasmodic trouble under very good control until July 11th, when his brother Claude was seized with a very severe attack of hystero-epilepsy. This excited him very much and caused the return of grand mal. The family bedrooms were adjoining, and while the boys were separated one would cry out and the other answer. This would be followed by severe spasms in each, one aggravating the other to such an extent that, on July 14th, it became necessary to remove Ernest from home to one of the infirmaries. Soon after leaving home he became quiet, and while in the infirmary, where he remained about a week, there was very little or no spasmodic trouble. He was taken from the infirmary to the house of a relative, where he remained two weeks, during which he continued to improve very nicely. At the expiration of this time it became necessary to return him home again. This increased his spasmodic trouble for a few days. Then he quieted down and continued to improve until August 13th, when he had an attack of acute diarrhœa, by which he was very much prostrated. In recovering from this on August 18th, he went into a trance that continued twenty-four hours. After recovering from this trance state he has continued to improve very rapidly up to the present time without any return of the spasmodic trouble.

On the morning of July 11th I received an urgent call to see Claude B——, a brother of the above patient. On entering the room he was found in a state of frenzy, barking and attempting to bite his attendants. Failing in this he bit himself a number of times. In a few minutes following this condition he had a general convulsion, with opisthotonos so extreme that the occiput touched the dorsal vertebræ, the patient resting on his face and feet. In a moment this condition was just reversed, with chin resting on his breast, limbs drawn up, and his knees touching his abdomen. He would continue this series of convulsions, first one form and then another, for five minutes; then remaining quiet for a few moments he would begin singing and growling with barking and attempting to bite his attendants or himself. During the barking and biting period he would go through all sorts of facial contortions. After watching him for a few minutes it was seen that he would go through a regular series of convulsions, and his condition was recognized as a severe attack of hystero-epilepsy.

Notwithstanding the use of appropriate sedatives, the paroxysms continued without cessation during the day, but he was quieted down as night came on and slept fairly well. The next morning the spasms returned, seeming to begin just where they left off the night before.

For two or three days he continued in this condition, but becoming a little more unmanageable through the irritation caused by his brother. On the morning of the 14th Ernest was removed from home, and then Claude became more tractable. During the first three days he was in a continual paroxysm all the time except while asleep. On the 14th it was found that the spasm so affected his throat that it was impossible for him to swallow anything, not even liquids; but by keeping him secluded the effect of the sedatives which he had already taken very freely was sufficient to control him. Gradually the convulsions became less frequent and severe, so that by the end of the first week they were under control. During this period he was unconscious all the time. As soon as the spasmodic trouble was controlled, he was found to be in a trance state. The second week of his illness he continued very vicious and combative; when molested in any way or approached by any one, he would begin snapping and attempt to bite them.

After the second week his vicious disposition subsided, and since then there has been very little difficulty in controlling him. During the first two weeks of his illness, owing to the spasm of the throat and his vicious state, it was so difficult to give him anything that he took very little food—the medicines needed to quiet him was about all he could be made to take—but since that time he has been taking food and medicine fairly well. It is now seven weeks since his first attack, and he is still in a state of trance; during the continuation of this trance state he has been exceedingly restless in the day, but sleeping fairly well at night from the effect of the medicines. He has not been able to walk any since the attack first came on. During the day he goes about the house on his hands and knees, with his eyes closed, and

during the early period of his illness, while he remained so vicious, with frothing of the mouth all the time, he seemed like a caged lion. There has at no time been any fever in the case, but occasionally he has periods of depression with cold extremities. Within the last day or two he has shown a tendency to a return of consciousness, he has a better expression, is inclined to open his eyes better, and on a few occasions has recognized and spoken to his attendant.

As usual in trance cases his eyes have been closed since the beginning of the attack; by using a little force they can be opened, and seem to be natural in appearance, only lacking the expression of intelligence. There has been no ophthalmic examination. If it were made it would probably show no abnormal conditions. There has been no paralysis or other indications of compression, or any other of the grosser brain-lesions. General sensibility seems to be somewhat exalted, and the usual reflexes respond to their appropriate tests. He hears sounds, and is very much irritated by noises in general, but has no comprehension of spoken words. He pays no attention to anything that is said to him. During the first week of his illness, when the spasmodic trouble was so marked, the unconsciousness was attributed to status epilepticus complicated with hysteria, but since the spasmodic condition has been controlled, followed by the prolonged trance, it is probable that the trance dates from the initial seizure.

The family history shows poor vitality, spasmodic troubles being in some of the collateral branches on the paternal side. His maternal ancestors have all died of consumption, his mother herself having been an invalid for several years, suffered with severe cough and frequent hemorrhages, but latterly her health has improved, and at the present time is in very good physical condition, except severe nervous headaches; the father has always been in good health. While at school, five months previous to his present illness, Claude received a blow in the left temporo-parietal region that stunned him for a while, producing confusion and loss of consciousness; but he soon recovered without any indisposition following it. He continued at school, without interruption, during the remainder of the session. On the 9th of July, two days before his present attack, his brother, in a state of frenzy, attempted to kill him, striking him a blow in the left eye, without doing any damage to the eye itself; he was dazed for a few moments, and from that time had several attacks of petit mal per day until he was seized with hystero-epilepsy.

These boys are the only children in the family. They have an inherent instability of the cerebral organization, and the present attacks of spasmodic trouble were caused by shock from the injuries. In neither case were the blows on the head sufficient to produce either fracture of the skull or concussion of the brain.

Aside from the complication of trance in one of these patients, hystero-epilepsy itself is seldom seen in this locality. Out of a large number of epileptics that I have had the care of, this is the first case seen; and out of a number of physicians who have seen these patients with me, none of them had previously seen a case.

217 West Broadway.

Exophthalmic Goitre and the Color of the Hair.—Referring to the question raised by Dr. Neal as to the color of the hair in exophthalmic goitre, Dr. E. S. Dunster, of the University of Michigan, writes: "I have at present under treatment a well-defined case of ophthalmic goitre, in which the hair is of a dark brown color, almost approaching black. In the few other cases (four or five in number) that have come under my observation, no record was made of the color of the hair. I have, however, a general recollection that in most of them the color was light; but to make such a statement definitely, unsupported as it is by recorded evidence, would carry little more weight than a guess."

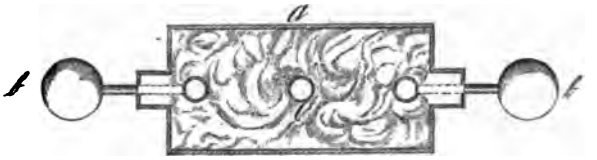
A METHOD OF PRODUCING OZONE IN LARGE QUANTITIES.

By ANDREW H. SMITH, M.D.,

NEW YORK.

The question as to whether ozone has any therapeutic value is still unsolved, owing probably in a great degree to the difficulties of production in quantity sufficient for satisfactory experimentation. An observation made by the writer in December, 1883, seems to open a way by which these difficulties may be overcome, and ozone produced with sufficient readiness to permit the study of its physiological and therapeutical action on an extended scale, and also its remedial use, if it should be found to possess curative properties.

Cotton wool, when deprived of its oil as in the preparation of "absorbent" cotton, is a sufficient conductor of static electricity to secure the diffusion of that agent through a considerable mass of the fibre placed loose



between the prime conductors of a static machine. If the experiment is tried in a darkened room the cotton assumes the appearance of a luminous cloud. A large surface of air contained in the cotton is exposed to the electrical action and a corresponding amount of ozone is produced.

The apparatus which I have had arranged as the result of the above observation consists of a glass cylinder ten inches long by five inches in diameter, and having a narrow neck at each extremity, through which a brass rod is passed connected with the respective prime conductor and terminated by a base. On one side of the cylinder and midway in its length is an opening an inch in diameter, and provided with a lip for the attachment of the inhaling tube. The cylinder is loosely filled with absorbent cotton and the balls attached to the rods from the prime conductors are introduced a short distance through the necks. The current is thus made to traverse the cotton, and when the machine is operated in the dark, the whole interior of the cylinder becomes luminous. The air drawn through the tubes is supplied by the openings at the ends of the cylinder, which are much larger than the rods which pass through them when a four-plate Holtz machine is employed. This air is so highly charged with ozone that it must be inhaled with caution. If breathed uncautiously it excites cough and produces a disagreeable irritation along the respiratory tract, and especially at the bifurcation of the trachea, which irritation may continue for several hours. Persistence in the inhalation would, no doubt, be followed by congestion or inflammation of the bronchial membrane.

The remarkable power of ozone as an oxidizing agent has led to the idea that it might be utilized in the treatment of disease, especially of a septic character. No definite results, however, have been attained as yet.

Dental Lesions of Morphinomania.—Dr. Combes states that there is a peculiar form of caries which attacks the teeth of those addicted to the use of morphine. It appears first on the triturating surface of the large molars and extends rapidly until a large cavity is formed. The bicuspids, incisors and canines are then attacked in succession. This form of caries is nearly painless, advances with great rapidity, and is unaccompanied by periosteitis. The dental lesions occur usually at the same time with the falling out of the hair.

A CASE OF DISLOCATION OF FIRST CERVICAL VERTEBRA—RECOVERY.

By H. R. CARTER, M.D.,
PASSED ASSISTANT SURGEON, UNITED STATES MARINE HOSPITAL SERVICE OF SAN FRANCISCO, CAL.

The patient, a sailor, aged twenty, was admitted to hospital May 31, 1884. His companions stated that he had fallen from aloft that morning, a distance of about twenty-five feet, striking the back of his neck or head on a rope eight or ten feet above the water. When he struck the water he had a slight convulsion and lay motionless. He was unconscious and quite limp when picked up, but after coming to his senses had been jerking and stiff up to the time of admission, about six hours later.

Examination showed the occiput drawn well back and down as far as possible, the chin projecting forward but not raised. Not an extension of the head, but more like the position one would take expecting a blow on the back of the neck. Pain in the neck was continuous but not very severe, with the head in the above position and at rest. Pressure in the furrow behind the occiput was unendurable, producing great pain and a general tetanic condition.

The patient was continually jerking, and any handling, as in removing his clothing or even a decided touch, increased that condition, producing true though slight general spasms. The symptoms resembled those of strychnia-poisoning, save that the face was unaffected. The left arm was blue, cold, sweating profusely, rigid, and absolutely powerless. The right arm powerless, but less rigid than the left. The legs were not paralyzed but rigid and clumsy. Sensibility was at first present, but later was lost, and the patient was unable to swallow, even his saliva. Every attempt to bring the head forward produced unconsciousness. This occurred three times and during the examination, although the movement of the head was *very* slight. Consciousness was quickly, but not immediately, restored by bringing the head to its former position. While unconscious he was flaccid; on recovering there was a succession of spasms, the extensor muscles being very rigid. Pain was also produced in the neck, back, and arms, which gradually lessened on remaining quiet. The head was fixed only by muscular action, but the patient could not move it on account of pain. The finger being passed into the pharynx, a decided displacement of a vertebra forward was at once discovered at the upper part of the pharynx. The man was rational and not excited mentally, even during the spasms following unconsciousness. Everything seemed best explained by a dislocation forward of the first cervical vertebra on the second.

A full does of chloral was given by enema, and when the patient had come under its influence, I directed the nurse to lift up the head strongly, slightly extend it, and rock it very slightly. Pulling on the back of the neck with my left hand, I pressed with the thumb of the other on the projection in the pharynx, in a direction backward and upward, imparting to it at the same time as much of a rocking motion as possible. It was as much as a minute and a half before the projection began to yield; then it quickly but not suddenly moved into place; no click was heard or felt, but the head came up into position. The patient said "All right," before my thumb was removed from his mouth. A considerable amount of force was used, all, I believe, that I was capable of exerting. The head and shoulders were dressed on a pillow properly stiffened. He could swallow immediately. The twitching and rigidity disappeared in two and a half hours. The awkward, clumsy movements of the legs and arms disappeared the next day. The neck was painful and stiff for ten or twelve days, the man walking about at first with his head in his hands to steady it. The symptoms of vasomotor derangement in the left arm, viz., profuse sweating, cutaneous capillary congestion, etc., continued longer, and had not entirely disappeared at the end of sixteen days.

Clinical Department.

COCAINE IN THE EXTRACTION OF TOE-NAILS.

Dr. W. T. Smith, of Hanover, N. H., writes that he recently used cocaine in extracting a great toe-nail, with results that seem worthy of record in view of the ordinarily painful nature of this operation. He made four injections about the nail and then ran his needle under the centre of it. In a few minutes he thrust the blade of his scissors along the track of the needle and split the nail to its base and removed it with the forceps. The patient watched the operation, and said that it was absolutely painless. He used a four per cent. solution, and judged that fifteen or twenty minims were absorbed.

MAGGOTS IN THE EAR.

Dr. W. Fletcher Wilson, of Denver, Col., sends us the following history: Cora S——, aged twelve, called at office, July 25th, for relief of ear trouble. For nine years she had had a chronic discharge from the left ear. She had received no treatment, with the exception of simply syringing for the purpose of cleanliness. Two weeks previous to her calling at the office, she had been allowed a week's visit to some friends. While there the syringing was neglected. On her return home she complained of severe pain in the left ear. On application to family physician, a few drops were given, and a small glass syringe used, to cleanse the ear of the discharge. No relief, but increasing pain following, a consultation was called. She was then in a very weak and exhausted condition.

Examination showed a thin and bloody discharge from the ear, and a mass of maggots filling the external auditory canal. On touching with a cotton carrier, they would recede so as to almost disappear from sight without the aid of the speculum. After a few moments they would again come near the opening.

Using a pair of forceps, with serrated edges, two were removed. Springing from the head of each were two small, curved tenaculæ, about a line in length, with which they fastened themselves to the wall of the canal, so that when being removed they allowed of considerable stretching before loosening their hold. Each time, after removing one, the lively movements of the others, from being disturbed, caused such intense pain that, on removal of a second, the child fainted.

Syringing was then resorted to. Although using a very strong stream, I succeeded in removing but one. I then placed the child prone on the right side, and filled the diseased ear full of sweet-oil. After tedious waiting, I seized with the forceps each maggot as it came to the surface, and succeeded in thus removing seven, making in all ten. Pain ceased immediately after their removal. The canal was then thoroughly cleansed. Its inner third was entirely denuded of flesh; also, membrana tympani and mucous membrane lining tympanic cavity were gone. The bones of middle ear were so loosened that the malleus and incus were removed from the canal while being cleansed. Entire loss of hearing. Under the use of carbolic acid, three grains to the ounce, and frequent cleansing with cotton carrier, the discharge ceased and the parts recovered as far as possible.

The children had been in the habit of sleeping a short time each day under the shade of some trees. A fly, probably attracted by the odor, entered and deposited the eggs from which the larvæ were developed. Not being at home, the syringe was neglected and the eggs allowed to remain.

The above case well illustrates the necessity of cleanliness in ears suffering from chronic purulent otitis. When we take into consideration the tenacity with which the larvæ clung to the walls, and their manner of reced-

ing into the depths of the canal when disturbed, with my failure to dislodge them with a large syringe, it is not surprising the parents did not discover them.

The larvæ were about one-third of an inch long and one-twelfth of an inch thick. They seemed filled with blood. Two of them were killed; the other eight were placed in a two-ounce bottle, and a small piece of meat thrown in. After three days two more died. A little dirt was then placed in the bottle, and the larvæ at once buried themselves. In about two weeks four developed into very large grayish-black flies, about the size of horse-flies.

A CURIOUS MONSTER.

Dr. R. H. Spencer, of Peramo, Mich., writes: "I have recently attended a case of labor in which a female child was born, which is a curiosity. Child presented by the breech and was delivered after the usual method. The lower limbs are drawn up to the abdomen and there seems to be no action in the hip-joint, the knees look more like elbow-joints and are also anchylosed, the feet are an exaggerated form of talipes valgus, and at the union of the sacrum and lower lumbar vertebra there is an opening that looks very much like the anus, through which I could pass the end of my little finger, and on doing so it caused bloody serum to ooze from the rectum. The child is now three weeks old and doing well; the opening in the back has nearly closed. The question arises in such a case, as to the duty of the physician in keeping such a child alive. It was my wish to cut the cord and not tie it, but the family objected as they wished to have it baptized, they being Catholics."

SWAMP BUTTON-BUSH IN RHUS POISONING.

Dr. S. P. Hubbard, of Taunton, Mass., writes: "As I have never seen in any medical journal the virtues of the swamp button-bush (*Cephalanthus occidentalis*), for poisons of all kinds, especially *Rhus Tox.*, I wish to say to the medical profession that no remedy half equals it. Try it. Make a strong tea and freely bathe the parts with it while hot."

MENINGITIS AS A RESULT OF OTITIS.

Dr. E. E. Mather, of Williamstown, sends us the following history: On Monday, July 13th, at 4 A.M., he was called to see M. G——, farmer, aged thirty-three years, married; the messenger stating that he was in a fit. He found him in bed, having recovered partially from the seizure, but breathing heavily and still in a semi-comatose condition from which he could with difficulty be aroused, but exclaiming, when aroused, "My head! oh, my head!" Temperature 100°; pulse 70 and even; respiration stertorous; the pupil of left eye one-half smaller than the right pupil; there was ptosis of the lid of left eye; there was a peculiar immobile condition of the face; no paralysis.

His wife said that from an early age he had suffered from severe attacks of pain in the left ear, the attack resulting in suppuration, when the pain would be relieved. He had not consulted a physician for them. These attacks of otitis and otorrhœa were not continuous, but would recur on slight provocation. For two or three days before the doctor saw him, he had the earache (always the left ear), but continued his work in the hay field, and on Saturday he became very much heated in attempting to secure the last load from an approaching thunder-shower. The shower caught him and wet him through. That night and next day he suffered excruciating pains in the left ear, until at length the doctor was called. There was no outward suppuration; there was a moisture or sweating of and in the external ear. He recovered in some degree his consciousness, but there was constant tendency to sleep. There was almost total loss of memory. All food was refused; there was nausea and vomiting; bowels constipated. There was also a peculiar form of aphasia—he could not remember words: amnesic aphasia. For instance, he would beg me to give him some "epizootic." The pain in the head was confined to the left side; the same immobility of the features; ptosis of left lid and occasional profuse sweats. The temperature after the first two days ran not above normal, and sometimes under; the pulse grew slower every day until it reached forty-six; when aroused from his sleep, he would yawn and yawn; no paralysis at any time. This condition of things was maintained until the day previous to death, when his temperature was 101°, and pulse 72. No autopsy would be allowed.

Progress of Medical Science.

Supposed Rupture of Kidney.—A boy, aged fourteen years, leaped over a hedge, landing upon a lower level on the other side on his feet, but rolled over on his left side. He picked himself up and walked some distance, not complaining of pain. When he made water it was very bloody, and afterward vesical tenesmus was very constant. He was driven eight miles to the nearest town; on arriving he had recovered from the shock. He had pain and "severe spasms" over left ureter and kidney. He was treated by rest, liquid diet, gallic acid and opium, and ice locally, which relieved the pain over the kidney. Next day the urine contained less blood, sp. gr. 1.022. Microscopical examination showed traces of broken tubules, no renal epithelium; there was a swelling over the site of the left kidney; temperature normal. Six days afterward the urine was clear; occasionally there was a slight trace of albumen. He returned to school in a month. Dr. Campbell, who had the case under observation, believed that the accident occurred by the kidney being pinched between the false ribs and the ileum, or that the weight of the kidney was sufficient to lacerate some of the vessels in the cortical substance.—*Liverpool Medico-Chirurg. Jour.*

The Functional Condition of the Leg after Transverse Fracture of the Patella.—In a paper read at the French Congress of Surgery, M. Richelot, of Paris, holds that, when persistent lameness follows transverse fracture of the patella, such condition is due not to separation of the fragments of the bone, but to atrophy and consequent loss of power of the quadriceps muscle. There are many subjects of old fracture of the patella who, notwithstanding separation of the fragments to the extent of nearly four inches, are able to walk about and to ascend and descend stairs quite as well as though the bone were normal. It often happens that the functional power of the injured limb improves the more as the separation of the fragments continues to increase. When the rectus muscle has lost a fixed point of insertion, and can play but a very slight part in extension, there remain the two vasti muscles, the inferior attachments of which are never torn through. It is necessary, therefore, in cases of fracture of the patella, to prevent, if possible, any atrophy of these muscles. The first muscle to waste is the rectus, then the vastus internus, and, finally, the vastus externus. The atrophy is of the same nature as that resulting from arthritis, or from any other articular lesion. M. Richelot holds that, in the treatment of fracture of the patella, it is more important to prevent wasting of the extensor muscles than to attempt to bring the fragments together. Most surgeons, he states, have seen examples of good locomotion, with considerable separation of the fragments, and other examples of extreme lameness with the fragments in close or even immediate apposition. This absence of relation between the extent of the pseudarthrosis and the degree of functional impairment, indicates that wide separation of the fragments

is not the essential element of the loss of power of the limb. Atrophy of the quadriceps muscle, varying much in extent in different cases, but of very common occurrence after fracture of the patella, is the main condition on the intensity and persistence of which depend the intensity and persistence of the functional impairment of the limb. Separation of the fragments certainly impairs the extending action of the rectus, but this muscle does not form more than a fourth part of the mass of the quadriceps, and the two vasti muscles always remain attached to the sides of the inferior fragment, and, therefore, if not atrophied, are sufficient to maintain the functions of the limb. When the lateral fibrous structures remain intact, and there is not an absolute solution of continuity between the thigh and the leg, it is useless, M. Richelot argues, to endeavor to bring the fragments together by a multiplicity of apparatus, or to perform arthrotomy, which, not to speak of its dangers, seems superfluous if the quadriceps be normal, and illusory if it have undergone atrophy. In the treatment of fracture of the patella, after the limb has been fixed in a simple apparatus and the most simple means of bringing the fragments together have been applied, the surgeon's attention should be mainly directed to the quadriceps muscle.—*London Medical Record.*

Successful Cerebral Surgery.—In *The Lancet*, May, 1885, Dr. Macewen reports the case of a man, aged thirty-six, who in August, 1883, fell downstairs, and was rendered unconscious for twelve hours. In November, 1883, the patient was admitted into the Glasgow Royal Infirmary, with impairment of power in the left arm, accompanied by muscular twitchings and pricking sensations in some parts. A lesion was diagnosed in the motor cortex of the upper half of the right ascending frontal convolution, probably due to irritation set up around an extravasation of blood, due to the previous injury. In December the author trephined, and found a membrane-like patch over the surface of the brain, involving the arachnoid and pia mater along with the external surface of the gray matter; there was also blood effused into the substance of the brain in the ascending frontal convolution. All this was removed, the bone was replaced after having been broken up into several small pieces, and the wound was dressed with eucalyptus gauze. The patient made a perfect recovery without a bad symptom, and two months afterward was able to do his ordinary work.

Saccular Dilatation of Urethra.—Lawson Tait relates a case, which he published in *The Lancet*, October, 1875, of a lady, who suffered from a sacculated dilatation in the floor of the urethra. Until the beginning of this year, the author states, he had never seen such a case, but during the past three months he has met with three cases almost exactly similar. The symptoms in all were precisely alike. There was a constant escape of fœtid ammoniacal purulent urine, which did not occur always on ordinary micturition, but only when there was any strain, or upon pressure, or change of position, and sometimes quite independently of the patient's control. On examination a tumor was found, apparently continuous with the neck of the bladder, presenting itself between the lips of the vestibule, closely resembling an ordinary cystic vaginocele. When a catheter was passed along the roof of the urethra, it went into the bladder and clear urine was drawn off; but, if passed along the floor of the urethra, it entered the cavity of the tumor, bringing away putrid urine. On each case, the author operated with complete success. This form of disease is stated to be, most likely, due to an error of development, by which a small offshoot of the urethra, like a diverticulum of intestine, is the result of faulty union of the primal folds; and this becomes of pathological importance when women become accustomed to those errors of urination to which they are all more or less addicted. —*British Medical Journal.*

Communicability of Tuberculosis by the Genito-Urinary Organs.—Dr. Settier narrates five cases, in which the contagion of tuberculosis was probably communicated by the genito-urinary organs. The first, a man, aged thirty-eight, with no family history of phthisis, contracted a disease of the prostate after marriage with a phthisical girl who had a constant leucorrhœal discharge, which discharge was found to contain numerous tubercle-bacilli. The pus from the man's urethra also contained unmistakable tubercle-bacilli. The second case was that of a healthy young man, aged twenty-nine, in whom, four years after marriage with a phthisical woman, there were swelling of the left testicle and epididymis, and enlarged prostate. The diagnosis was established by the recognition of tubercle-bacilli in pus from the urethra. Case three, was that of a woman, married to a phthisical man. After marriage she suffered from leucorrhœa, vulvo-vaginitis, and pelvi-peritonitis. When admitted, she was suffering from tuberculosis of the lungs, tongue, and ear. In case four, a negress, whose husband died of phthisis, suffered from a vast tuberculous abscess of the pelvis, with commencing mischief at the apex of the right lung. In case five, a man, aged twenty-nine, suffered from pulmonary and laryngeal phthisis. The right testicle, and especially the epididymis, was enlarged. This he attributed to an orchitis, which he had long before the chest was affected. —*London Medical Record.*

Fish-poisoning and the Fish-poison.—The supposition that fish-poison is a ptomaine, and that fish-poisoning is ptomaine-poisoning, receives confirmation through the researches of Professor V. K. Anrep, of Kharkov. During February and March, 1885, there occurred in Kharkov several cases of poisoning by salted sturgeon, five of which ended fatally. The author succeeded in isolating ptomaines (after the methods of Stas and Otto, and of Brieger) (*a*) from the sturgeon which had caused poisoning; (*b*) from the gastro-intestinal contents taken from one of the fatal cases; (*c*) from the liver, blood, brain, and spleen taken from the same fatal case; and (*d*) from the urine of another deceased patient. All the ptomaines proved quite identical in regard to their physical and chemical properties, as well as in regard to their physiological action on animals. Anrep's fish-ptomaine is an amorphous solid body, of strongly pronounced alkaline properties, and of highly toxic power. It dissolves in water only with difficulty, but gives salts which are readily soluble. These salts may be brought to partial crystallization (*in vacuo*). Under the influence of caustic alkalies, acids, and boiling, the fish-ptomaine undergoes decomposition and loses its toxic action. The characteristic peculiarities of the alkaloid are two: (*a*) its stability (the ptomaine in substance as well as its ethereal solution did not suffer the slightest change in its chemical and physiological properties even after a month's keeping); and (*b*) its slow action on red blood-salt, the reduction of the latter being effected only in three to six hours. The author carried out a series of physiological experiments to elucidate the action of his ptomaine on animals. In dogs, a hypodermic injection of a quarter of a milligramme of hydrochloric salt rapidly produced sickness, vomiting, moderate dilatation of the pupils, then dryness of the mucous membranes, thirst, and general prostration; in about two hours there appeared retardation of the respiration, weakness, and slight retardation of the cardiac action, and considerable failure of reflex action. The symptoms lasted for about ten hours, and then the animal pretty rapidly recovered. In rabbits, the identical injection produced considerable dilatation of the pupils, very considerable retardation and difficulty of respiration, progressive weariness of the cardiac action; an hour later, paresis of the hind limbs; and in two hours, death from simultaneous arrest of the heart and respiration. In frogs, an injection of a dose much smaller than a fourth of a milligramme (0.0038 grain) brought about paralysis, loss of reflexes, dilatation

of the pupils, failure and retardation of the cardiac action and respiration, and, on the second or third day, death. The symptoms of fish-poisoning in man presented a nearly complete likeness with those produced in animals by Anrep's fish-ptomaine. Within three to six, not later than twenty-four hours after the ingestion of poisonous fish, there appeared malaise, sickness, giddiness, then pain in the stomach, vomiting, paleness of the face, dryness of the mucous membranes of the mouth and tongue, thirst, failure of sight, ptosis, dilatation of the pupils, coldness of the limbs, labored respiration, feeling of oppression in the chest (especially in the præcordial region), weak and small pulse, difficult swallowing, considerable prostration, slight decrease of the temperature of the body. In the further course of the fatal cases, the cardiac action markedly grew weaker and weaker, the respiration became more and more difficult, prostration and ptosis increased, the temperature fell lower; then appeared cyanosis, retention of urine and fæces, slight œdema of the face, indistinctness of speech, weakness of voice. On the second, sometimes on the third or fourth day, death ensued. Analyzing the list of the symptoms, Professor Anrep points out that the fish-poison paralyzes the spinal cord and medulla oblongata; probably also the unstriated muscular tissue.—*London Medical Record*, July 15, 1885.

Carcinoma of the Cerebellum with Scirrhus of the Lung.—Cantani reports the case of a woman, aged forty-five, who had occipital headache, rigidity of the back of the neck, inco-ordination of movements, progressive loss of the mental faculties, vomiting, tendency to fall backwards, and frequently also slowness of the pulse and respiration. The emaciation, vomiting, and epigastric pains might have given rise to the suspicion of cancer of the stomach, but the symptoms generally were those of a lesion of the cerebral nervous system, and the diagnosis made was that of tumor of the cerebellum. At the necropsy a small abscess, limited to the cortical substance, was found in the right parietal lobe, in correspondence with the first parietal ascending convolution; in the right lobe of the cerebellum was an abscess, of the size of a walnut, and in the left lobe of the cerebellum another abscess, of the size of a filbert. In the upper lobe of the right lung there was a nodule of scirrhus as large as an apple. During life there were no other signs of pulmonary lesion than raised percussion-note and prolonged respiration in the right superior lobe. The author supposes the abscesses were the result of suppuration from neoplastic foci of carcinomatous nature, developed in the brain, and that the pulmonary scirrhus was secondary.—*London Medical Record*.

Accessory Suprarenal Capsules.—Chiari describes four cases under his own observation, and proves that accessory adrenals may be found in males as well as in females, and in adults as well as in children; they do not undergo atrophy in youth, and lie between the kidney and the testicle or ovary. In one case, a large tumor was removed by laparotomy from the abdomen of a man aged forty-four; it lay between the right kidney and the brim of the pelvis, upon the quadratus lumborum and iliacus internus muscles, external to the psoas, and behind the cæcum and the peritoneum covering the right iliac fossa. It was invested with a capsule intimately connected with neighboring structures. Dr. Chiari looked upon the tumor as proceeding from an accessory adrenal, but consisting of irregularly-arranged adrenal tissue, and therefore cancerous. In support of his opinion, he notes that it grew in a region where accessory adrenals are found, and possessed a complete capsule, as is only the case in growths of a similar consistence and rapid growth, when they originate within an organ that has a true capsule. Grawitz has described new growths developed from healthy accessory adrenals. The characters of sections of the tumor examined by Dr. Chiari resembled, microscopically, normal adrenal tissue. Groups of characteristic pigmented cells, infiltrated with fat, were found, precisely similar to those seen in the substance of the suprarenal capsule. The tumor recurred, its substance bursting its capsule and invading neighboring organs.—*London Medical Record*.

Acute Suppuration after Forcible Rupture of Articular Adhesions.—Professor Oberst reports four cases from the hospital practice of Volkmann, on which acute suppuration followed the breaking down of articular adhesions. In each of these cases, the ankylosis had followed an acute infective process. In two cases the primary affection was acute articular rheumatism, and in one the ankylosis was the result of acute infective osteo-myelitis. In the fourth case, the nature of the primary affection could not be clearly made out, but there is no doubt, Oberst states, that it was some acute infective process. In two cases, the suppuration caused by the breaking down of adhesions—in one in the cuticle, in the other in the knee—did not extend beyond the affected joint, while in the other two it was very extensive, and caused much disorganization, necessitating amputation of the thigh in one of these instances, and causing death in the other. In the last case, which was one of ankylosis of the knee and deformity after acute rheumatism, forcible extension of the limb caused infraction of the inferior epiphysis of the femur, and was rapidly followed by acute and typical osteo-myelitis, with necrosis and formation of multiple abscesses in the medulla. Oberst thinks that the multiplicity of the abscesses, the character of the necrosis, and other morbid conditions in this case indicated that it was one of specific infective and not of simple septic osteo-myelitis, and it is suggested that it might have been due to the action of the poison of acute rheumatism. There can be no doubt, it is held, that in each of these four cases the suppuration set up by relatively slight force may be most readily explained by the supposition that, from the date of the primary acute affection during disease, germs had been left in the affected regions, and that, by the attempt to restore the functions of the joint, they had again been rendered mobile and placed under conditions favorable to the restoration of more active vitality. In each case, the patient at the time of operation was quite healthy—except with regard to articular deformity—and free from fever, and in not a single instance did any abscess or fistula exist at this stage. There could not, it is stated, have been any infection from without, as the integument in each case was quite intact, and the extravasation of blood caused by the forcible movements of the joint did not reach the surface. These cases, Oberst points out, should teach surgeons that they ought to be very cautious in attempting to break down ankyloses which have resulted from acute infective diseases. In cases of this kind, a cutting operation would certainly be less dangerous than forcible rupture of the adhesions by simple manipulation. In not one of the very numerous cutting operations that have been performed with orthopædic aims at the Oberst Hospital at Halle has any instance been observed, Oberst states, of complication due to infection. It is supposed that the micro-organisms remaining after the primary disease find a much less favorable soil in the disinfected and antiseptically-treated operation-wound than in contused and lacerated tissues, and in abundant or diffused extravasations of blood, conditions which often exist after forcible attempts to restore the functions of an ankylosed joint.—*Centralblatt für Chirurgie*.

Relief of Cramp of the Uterus during Labor.—For relieving cramp of the uterus during parturition, Dr. Svanberg employs a compress, soaked in a mixture of chloroform and olive-oil, equal parts of each, or two parts of chloroform to one of oil, applied closely to the abdomen, between the umbilicus and the symphysis pubis. He has found the result to be immediate relief of the spasm, even when the previous inhalation of chloroform has failed.

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THE PATIENT AND HIS CHOICE OF DOCTORS.

THE relation of the patient, family doctor and consultant is discussed in a recent number of the *London Lancet*. The editor regrets the increasing tendency of the patient to seek consultation independent of the family physician, and the decline which the present day witnesses in the esteem in which this personage is held. The patient takes his affairs in his own hands, and goes from one to another in search of opinions, which may actually, or according to his notions, differ in many instances. This tends to throw discredit on the profession and create a distrust in its judgment. The writer says: "It is well worthy of consideration of consultants and patients whether a system so mischievous should not be abandoned."

As it is impossible to discipline patients so that they will seek advice in only one direction, the plea is made to consultants. Their discourtesy to the family physician is pointed out, the coolness which will arise between them, and the disturbance of friendly feeling between the family and the physician. The injury done to patients themselves, because of the conflicting diagnoses which are liable to occur, is also shown. It tends to merge the consulting physician into the specialist, whose attention is too apt to be concentrated on the localized disease, unless the family physician interfere in behalf of his patient. A diagnosis, too, may be made without due deference to the family history. Moreover, the patient sees his consulting physician seldom, and makes use of his medicine for a long time when it is no longer appropriate.

In all this there is, indeed, more than a modicum of truth; but there is also an obverse to it worthy the consideration of the "family physician," if not "the consultant" and "the patient."

It is true we are living in a different age from a generation or so ago, when clergymen and doctors were institutions which ran parallel with the lives of families, fixed and immutable, until summoned

> "To join
> The innumerable caravan which moves
> To that mysterious realm where each shall take
> His chamber in the silent halls of death."

Independence of thought and feeling are rife in every department. Scepticism is a ghost not to be laid, and plays the mischief with the once honored "family physician," who now holds no sinecure, but must prove his right and title to the office by his display of skill and intelligence, and the power he has of convincing his clients that he is abreast with the times. *The Lancet*, with praiseworthy conviction, assumes that the "family physician" is infallible. It has not the slightest misgiving that by any chance he may be a fossil, who is liable to err, who has a pompous reliance on his own judgment, and if questions arise will bring in a friend who will support his view of the case, and will not in any event go counter to his wishes. The patient becomes a shuttlecock tossed only to and fro between the battledores of their two opinions, to their edification but little to his benefit. Tied up with the red tape of etiquette, there can be no interference. The amicable relations of the physician must not be disturbed, nor that of physicians and families. The question of the patient's welfare is one of minor consideration.

It is at best a delicate relation which a physician holds toward a patient. That of the clergyman is nothing in comparison. The hypothetical soul and its treatment disturb its possessor very little for the most part. The property of the individual comes nearer to him, and he selects his lawyer according to his purse and his opinion of ability. The body, although a living, every-day palpable reality to its owner, is more mysterious and incomprehensible than either of the two—that is, if it gets out of order. He is buffeted with notions of how to take care of it. And though the words of the Sphinx, "Know thyself," sound ever in his ears, he is conscious it is a riddle that he never can solve, and puts the solution into the hands of his doctor with more blind faith than he leaves his soul with his clergyman, or his property with his lawyer. It is no wonder that he has misgivings, and that he wanders from oracle to oracle in the hope of enlightenment. It is well to warn him against such a course, as confusion becomes more confounded, and, as *The Lancet* justly observes, little good can result to him.

The Lancet blames the consultant, and with some show of justice; nevertheless we do not think that his position is sufficiently considered. If he is the doctor he ought to be, he should feel that the patient could be benefited by no counsel as well as by his; for no physician, to take the highest view of the case, should practise until he feels that he is competent to do as well, nay, even better, than any one else. Such being the case, it is depriving humanity of its rights to withhold his opinions and treatment when applied to for them. Especially as the patient, for the time being, at least, is of the same mind. Why should an iron-bound etiquette interfere? Why has not the patient the same right to go from doctor to doctor as to go from shop to shop in search of an article to suit him in quality and price? to go from church to church to find the clergyman whose sentiments, oratory and rhetoric please him? to go from lawyer to lawyer to find the one who will best plead his case and preserve to him his property? He may err in judgment in all these; he has the same liability to err in the matter of his doctor—doubtless will; but why should it be a matter of personal offence between physicians any more than between merchants, clergymen, and lawyers, who

do not bind themselves together with any such notions of etiquette?

The golden rule of doing unto others as one would be done by should certainly be observed in all relations, and among doctors especially. The consultant should not feel that it is his especial duty, as he often does, to alarm the patient in regard to his previous course of treatment, and however much the doctor may think it, it is not quite kind to the absent to tell his patient that up to the time of his fortunate meeting with him all had been wasted and worse than wasted that had been done. Moreover, he should remember to take *cum grano salis* the remarkable statements of the patient relative to anatomical facts and diagnosis, ever bearing in mind that what he says may be interpreted in the same way to some one else, and that a broad mantle of charitable consideration is due to his brother practitioner, who would doubtless be as much astonished as any one at the form his statements had assumed.

In these respects, therefore, we must differ with *The Lancet*, and come to the conclusion that a plea is not so necessary for the family physician as for the consultant, who has by far the heaviest burden to bear in the task put upon him to behave like a Christian and a brother, and above all for the patient, innocent as a lamb, who finds in any case perplexity and distrust, since he comes to a market to purchase wares concerning which he knows little or nothing.

MASKED ARTICULAR RHEUMATISM.

CONSIDERABLE attention has been paid of late years to various forms of latent rheumatism in which the disease does not manifest itself primarily or solely in the articulations, but in which other organs and tissues are attacked, to the exclusion even in certain cases of the joints. In children, as is well known, the articular implication is often so slight as to pass unnoticed, and perhaps the nature of the disease is never discovered, or it is learned only when the heart symptoms declare themselves. But it is not to such cases as these that we wish to refer, but rather to those in which some other structures are attacked primarily, giving rise to symptoms well calculated to deceive any who do not remember that rheumatism is a general disease, and not an articular affection.

We have already noticed in these columns a pulmonary form of rheumatism described by M. Lebreton. This occurs in individuals, belonging to a rheumatic family, who may or may not have previously suffered from the articular form of the disease. There are three principal varieties, the pneumonic, the œdematous, and the congestive. The symptoms of the first variety are not those characteristic of true pneumonia. The face is pale, and the stethoscopic signs are fugitive, not being confined to one lobe or one lung, but changing about from one lung to the other, or from the apex to the base, with most perplexing irregularity. In the œdematous form there is pallor of the face, respiration becomes suddenly labored, and the ear applied to the chest hears râles in every part. In both these varieties the skin is constantly bathed in a profuse acid perspiration. The congestive form occurs under three clinical varieties. There may be frequent hæmoptyses without any other evidence of pulmonary lesion, or there may be repeated attacks of dyspnœa equally inexplicable by any intrathoracic disease. Lastly, there is the latent variety, giving rise to no special subjective symptoms, and characterized simply by a sound resembling the crepitant rale of pneumonia, heard only in inspiration.

In a communication addressed to the Paris Academy of Medicine some three years ago, Dr. Maurice Perrin related a number of instances of conjunctivitis due to rheumatism. This affection resembles, in the rapidity of its development and the gravity of its symptoms, gonorrhœal ophthalmia, and the integrity of the cornea is often seriously endangered. There are, however, certain forms of less severity, not purulent, and resembling simple catarrhal conjunctivitis.

Certain cases of epilepsy have been referred by Tiessier, of Lyons, to the influence of the rheumatic poison. He has seen persons attacked with epilepsy for the first time while they were suffering from articular rheumatism, and others who were epileptic and had never had any of the joint manifestations, but who came from a rheumatic family. These cases were all promptly cured by appropriate medicinal treatment.

At the Congress of German Physicians, recently held in Wiesbaden, Dr. Immermann, of Basle, said that he had repeatedly, in recent years, met with cases of acute neuralgia of the fifth nerve, due to the action of the rheumatic poison. That they were referrible to this cause was shown by their clinical course, by the fact that they occurred at a time when acute articular rheumatism was epidemic in Basle, and, lastly, by the effects of treatment. The cases were accompanied by high fever (in one instance of 104° F.), and in some there were secondary heart lesions. The pain was intense, and was located in one or other branch of the trigeminus, but the impression given to the observer was not that of a purely local neuralgia, but the affection seemed, in some indescribable way, to be rather part of a general disease. The neuritis yielded readily to salicylate of soda. Dr. Edlefsen, of Kiel, remarked that he had also met with similar cases of trigeminal neuralgia of rheumatic origin, which had promptly subsided upon the exhibition of salicylates.

These forms of rheumatism are evidently analogous to the latent manifestations of the malarial poison, and their treatment is to be conducted in the same way, by the exhibition of the specific remedy. Now that the existence of these masked forms of articular rheumatism, as they are designated by Immermann, has been demonstrated, their number and variety will doubtless be largely increased by successive observers, and perhaps many affections which are now so rebellious to treatment will be found to belong to this category, and, their true nature being known, they may be seen to be more readily curable than has hitherto been supposed.

AN AMERICAN DAVOS.

THE physiological and therapeutical effects of high altitudes and a winter climate have been very carefully studied by European physicians, largely because of the good practical results secured by invalids at Davos, in the Engadine, and at similar places in Switzerland.

Davos is situated in a valley at an elevation of 5,400 feet, at latitude 47°. The physical conditions there which produce the results observed in consumptive invalids are: 1, Great elevation above sea-level; 2, a continuous and, during winter, permanent covering of snow; 3, a minimum of watery vapor in the air; 4, a clear sun; 5, a clean atmosphere, free from zymotic germs, dust, and fog; 6, a sheltered position, favorable for receiving both the direct and reflected solar rays.

As in all high altitudes, the solar radiation is very intense. It is a fact that with increase of altitude the sun-temperature rises while the air-temperature falls. At Davos, for example, the sun-temperature is from 89.2° to 108°, while the air-temperature may be near zero.

Dr. Hermann Weber summarized the physiological effects of such a high, cold altitude as Davos in a series of lectures delivered in London last winter:

1. Increased activity of the skin, better nutrition and invigoration of the skin.

2. Strengthening of the heart and the contractile fibres of the vascular system, with augmented frequency of the heart's contractions at first, but reversion to the normal state after a longer sojourn, together with greater force of each contraction, and thereby increased suction-power.

3. More rapid respiration at first, but return to the normal rate after a few days. Probable increase of depth of inspirations. Strengthening of the respiratory muscles, and probably also of the elastic fibres of the finest bronchial branches. Increased flow of blood through the lungs.

4. Generally a marked increase in the excretion of water through the lungs, and increased and facilitated excretion of carbonic acid.

5. In most cases transient or continued increase of appetite, ingestion of food, digestion, and assimmilation.

6. Thereby improved production of blood and nutri tion of the organs.

7. Greater energy of nervous and muscular action.

8. In most cases improvement of sleep.

9. Probable augmentation of tissue-change.

Dr. Edward Frankland, president of the Royal College of Chemistry, has called attention in the *Popular Science Monthly* to the fact, as he believes, that the United States has in the Yellowstone Park a climate quite equal, if not superior, to that at Davos. The great plateau of this park is between seven thousand and eight thousand feet above sea-level. The mountains about it are from ten thousand to twelve thousand feet high. The period of permanent snow is longer than at Davos, the latitude a little lower, viz., 44° to 45° parallel, and there are plenty of places where a free horizon southward can be obtained; in all these respects the park being superior to Davos.

Dr. Frankland's opinions are based upon a hasty visit, and are mainly suggestive in character. It is well for physicians to know, however, that there is an American Davos in their reach. The badness of the accommodations for the present prevent any utilization of the park by invalids. Some studies must be made also upon the very important factor of the quality of the soil.

THE INDICATIONS AND METHODS FOR RADICALLY TREATING HERNIA.

THE question of the propriety of attempting a radical cure of hernia by operation is a frequently recurring one. The importunities of patients and the ambition and ingenuity of surgeons combine to this result. Despite the most strenuous arguments, however, in favor of various methods for radically relieving hernia, it is still the general opinion of surgeons, that for the vast majority of cases we have yet no safe and sure method of cure, and that the routine or even frequent performance of the so-called radical operations, except for "congenital" cases, is not justifiable. An interesting review of this subject has recently been given by Mr. John Wood, in a series of lectures delivered before the Royal College of Physicians. Mr. Wood has identified himself with the advocates of radical operations, and has himself devised a method which is familiar in name, though not perhaps in detail, to readers on this side of the Atlantic.

In the past twenty-seven years Mr. Wood has operated upon 370 cases of inguinal hernia, with four deaths. Of those whose after-history is recorded, considerably over half are stated to have been permanently relieved.

Perhaps Mr. Wood's operation has not yet been duly tried in this country. It is certain, at any rate, that it has no popularity among surgeons here. Undoubtedly surgical opinion just now favors some of the various open methods advocated by Banks, Annandale, Alexander, Stokes, and others. Perhaps some of these plans approach dangerously near in practice to the old mediæval methods of simply tying the neck of the sac, and either cutting it off or leaving it and the sides of the canal to heal up as they lie. But however this may be, the "open operation," when carefully done, seems to have very little danger and to give good results.

Although, as we have stated, surgical opinion is still very conservative as regards operations for the radical cure of hernia, yet it does not follow that in the future these operations will not be much more regularly and extensively performed. Mr. John Wood, in the lectures referred to, gives a list of the indications for the radical operation, of which our London correspondent has presented the main features to our readers. (See MEDICAL RECORD, July 4th.)

"It appears indubitable," Mr. Wood says, in concluding, "from the results of the last twenty or more years' experience of the radical cure of hernia, that the position of those surgical writers who have maintained that the radical cure should not be attempted, except in the severest cases, is untenable."

INSANITY AND DIVORCE.

WE believe that there are some States in which insanity is admitted as a ground for divorce; but throughout the world the contrary rule holds in civilized countries. Every physician sees, at times, cases where this state of things is the cause of a life-long burden and unhappiness. And it is not unnatural that the question should be raised, at times, if the law as it exists is right. In a recent number of the *Medico-Legal Journal*, Dr. George H. Savage, of London, discusses the subject at length, and cites three cases as illustrating the condition and working of the English law.

Dr. Savage upholds the present law and practice—that insanity occurring after marriage should not be held as a ground of divorce. Indeed, he is so positive on this point that he thinks that arguments in its favor are unnecessary. Because a man has made a bad bargain is no reason, he says, why he should break the bargain. He as an individual must suffer for the good of society; besides it is very difficult to say that any given insane man or woman will never recover. These are the grounds which Dr. Savage indicates as those upon which he bases his opinion. For the present, Dr. Savage's view and the common law should undoubtedly stand, for progress in such matters must be careful and slow. But we feel certain that after a time the people and the law-makers will see that society is not benefited by a law which binds a man or woman for life to a chronic lunatic. In a large per centage of the cases of insanity which have lasted four years a commission of experts could safely and surely pronounce the disease incurable. Besides, if in some phenomenal and extraordinary instance the decision were wrong, would the harm in this rare and almost impossible instance be proportionate to the happiness conferred in many other instances?

While we are not ready, therefore, as yet, to take the ground that chronic, incurable insanity should be admitted as a ground of divorce, we cannot praise the perfunctory manner in which Dr. Savage dismisses the question.

The law with regard to insanity and divorce now is very much like that with regard to insanity and crime. One of the contracting parties may have been insane before or after, perhaps even at the time of, the marriage contract; yet this is not a ground for annulling it. Such ground only exists when it is proved that the party, at the time of the marriage, was of such unsound mind as to not know and understand the nature of the act. Dr. Savage cites two cases—one of them, that of Lord and Lady Durham, a true *cause célèbre*—which illustrate the working of the English law—and very bad work it is, too. In both cases insanity developed in marked manner directly or soon after the marriage, and in both cases the existence of mental unsoundness before the marriage is evident to a medical expert. Yet divorce was denied, because it could not be proved that at the time of the marriage the contracting party did not understand the nature of the act.

It may be that this English test is the only practicable one, considering all things, but it is certainly, from a scientific standpoint, irrational; and we see no reason why it should not be repudiated here by medical men, as it has been done in its application to criminal acts. The real question should be whether the person was mentally diseased at the time of the contract.

We confess to feeling a little surprised that Dr. Savage should allow his cases, which show so glaringly the injustice of the law, to go without more critical comment.

THE MORAL DANGER OF THE AMERICAN MEDICAL PROFESSION.

THERE is no denying the fact that the profession of this country is subjected to what we may term a moral strain that is greater than is experienced in older countries. The multitude of half-formed doctors turned out by our schools, the fierceness of competition, the American passion for "practical" and business-like methods, the haste for success, all tend to tempt the younger physicians especially toward a laxity in conduct. Considering all these things, it behooves every conscientious physician to keep a careful watch upon himself. His responsibility is very great. Although the practice of medicine has already assumed many of the features of a "business," it is not, and, as we have before said, never can, by honest men, be carried on just as a trade would be. Having to do only with the body and its ills, no physician of any conscience and human sympathy can fail to regulate his conduct on a higher plane than that of the simple *quid pro quo* of the tradesman.

Yet, unfortunately, it appears that men without conscience do get in our ranks, and even attain some standing there. It is against these that the profession must be on its guard. We have too long regulated what is good and praiseworthy in the physician by standards that are, in a measure, false and artificial. There have been times when a man, however sincere and honorable, would be looked at askant if he used electricity or massage, or pushed a probang down the larynx.

It behooves a doctor now to judge his fellow by high standards of Christian morals, and by these alone. He should be true to his patient, his colleagues, and himself. Such conduct should be the gauge of professional loyalty, and such conduct very much needs cultivating.

PERSONAL MEDICAL NOMENCLATURE.

WE propose to give our readers a little insight into the present condition of medical nosology, or at least into one phase of it. It will be very readily agreed that the human body has diseases enough, and that medical literature has technical terms enough; and we shall probably not find it hard to show in this, and succeeding articles, that these terms are accumulating upon us altogether too rapidly. Medical technical terms have in the past been largely a matter of chance, and they are now in some considerable degree a meaningless jumble of personal appellations, bad Latin, and worse Greek. We have had no tribunal in the past for determining what is appropriate as a name, and hence students of the present day are visited with the sins of their forefathers back to remote periods of time. One of the most glaring excrescences which is fastened upon medical nomenclature is that which attaches to anatomical parts or pathological processes the name of its supposed discoverer. It is to this that we would call attention now, and more particularly to the diseases which, in medical writings, generally receive the name of their first describer. In protesting against the practice of identifying a morbid process by a historical name, we do not wish to deny that there is in it a measure of justice. Nor would we insist too strongly upon its confusing and misleading effects, as illustrated last fall, for example, by the darkey who refused to vote for Blaine, and gave as a reason, "He ain' no 'onest man; he's got Bright's disease, an' why do'ne he give it back to Mr. Bright." But certainly, as a practice, it has become already an encumbrance, and it is time we should cry a halt. We doubt if our readers are quite aware of the number

of diseases which are carrying their discoverer's name to immortality. Neurology seems to have taken the lead, although the names are not always those of neurologists, while among races it is the French and English who lead in the department of personal nosology. Duchenne has had three diseases named after him, but by Duchenne's disease we generally mean locomotor ataxia. Paralysis agitans is also known as Duchenne's disease, while the Duchenne-Aran type of muscular atrophy is the name applied to the ordinary (spinal) form of progressive muscular atrophy.

Exophthalmic goitre is claimed by two countries and five individuals, and is called, according to the particular penchant of the writer, Parkinson's or Basedow's, Graves', Marsh's, or Parry's disease. Dubini's disease is a peculiar and fatal form of chorea (chorea electrica); Thomsen's disease, which is really a congenital defect of development, consists of peculiar attacks of rigidity of the voluntary muscles; Little's disease is the spasmodic tabes of children. Diabetes has been known as the disease of Willis. Charcot has two diseases named in his honor—the joint disease of tabes and amyolateral sclerosis; Bright's disease and Hodgkin's disease, or malignant lymphoma, are most familiar terms; Dupuytren's contraction is a peculiar disease of the palmar fascia, and Raymond's disease is otherwise known as "local asphyxia, local syncope, and symmetrical gangrene." The dentists have Rigg's disease and Fauchard's disease.

The saints, and the gods of the pagans have had their share also in medical nomenclature—of this, St. Anthony's fire, St. Guy's and St. Vitus' dance, the sacred disease of Hippocrates (epilepsy), and the ignis sacer, or anthrax, are illustrations.

News of the Week.

Professor Berger, of Breslau, well known as a neurologist, is dead.

Professor Ch. Seby, who had recently been called to the Chair of Anatomy at Prague, is dead.

The Medical Society of Virginia holds its next annual meeting at Alleghany Springs, beginning September 15th.

In the Congo Free State are 4,500,000 people and only half a dozen doctors; at least so accounts state.

Ferrán's Charges for Preventive Inoculation.—If, as seems likely, Ferrán is not to acquire fame through his so-called preventive inoculation of cholera, he appears to have had a good thing pecuniarily. The charge for each vaccination is said to have been about $2.50, and for several weeks in succession he and his assistants inoculated an average of six hundred individuals a day.

The Epidemic of Small-pox in Montreal is assuming alarming proportions. It is reported that there are over fifteen hundred cases now in the city. The sanitary service, never very efficient, is inadequate to the demands made upon it now.

An Operation for Cancer of the Stomach.—The daily papers of the 1st inst. contained full accounts (with office address of the surgeon) of an operation performed at Charity Hospital for removal of an abdominal cancer.

Cultivating Coca.—The coca plant, from which the new local anæsthetic is obtained, is being planted on a considerable scale at Ceylon.

Typhoid Fever in a Lunatic Asylum.—Typhoid fever has been prevalent in the New Jersey State Insane Asylum at Morris Plains, sixteen cases having already occurred. A careful examination of the premises and buildings resulted in the conclusion that the prevalence of this disease was caused by the imperfect drainage system. On one side the sewage is run into trenches within four hundred feet of the building, and is then allowed to deodorize in the air, and the gases are carried into the rooms of the patients.

New Fields for Medical Practice.—Our editorial of some weeks ago, in which we called attention to the possible advantages of certain foreign countries as fields for medical practice, has excited an unexpected amount of interest. We have received a number of letters from different physicians asking for further particulars. We cannot attempt to give them. Stanley's book on the Congo contains trustworthy information regarding that subject, though perhaps the views are a little rose-colored. Information regarding Mexico and the Argentine Republic can doubtless be got through the State Department and the consuls of those countries.

Dr. Partington, after reading of the wholesale withdrawals from the International Medical Congress as at present governed, was heard to remark sententiously, that he feared the Congress was likely to be merely a sexual one.—*Boston Medical and Surgical Journal.*

The Third Annual Meeting of the American Rhinological Association will be held at Lexington, Ky., October 6, 1885.

A Spurious Hermaphrodite.—A curious case, reported in the *Gazzetta degli Ospitali*, July 29, 1885, has recently come before the Italian courts of a supposed woman who was found to be a man. The case furnishes an instance also of poetic justice. The individual, who is now fifty-one years of age, was supposed at birth to be a female, and received the name of Faustina. Brought up as a girl, no suspicion was entertained of her sex, although at puberty the breasts were not developed and the beard began to grow. At the age of twenty-one she was married, but sexual intercourse was impossible, and after ten long years of ineffectual efforts the husband became discouraged, and the couple separated. Faustina had in the meanwhile discovered her powers, and had formed a secret attachment with a female acquaintance. After the separation from her husband Faustina went to live with a married brother. But they did not agree well together, and finally, after having come to blows, the brother turned Faustina out of the house. Fearing an arrest for assault, he thought to gain an advantage by accusing his pretended sister of having seduced his wife. The case was thus brought into the court, and Dr. Badaloni was called in to examine the defendant. He found that the case was one of complete hypospadias simply, and that the subject was unquestionably a man. The brother, however, not only lost his case, but was compelled to share his inheritance with Faustina, who had been excluded from it by law on account of his supposed sex.

ERRATA IN DOSAGE.—Dr. A. F. Fuchs, of Fredonia, Wis., writes: "Your Vienna correspondent, in writing about Nothnagel and his mode of administering powdered digitalis, uses the proper numerals, but the improper words in expressing the dose. Three grammes (3.0) are equal to forty-five grains, and are not written .03 or .3, but thus, 3.0. In his article your correspondent is incorrect in every instance in which he uses the word gramme, excepting as regards salicylate and benzoate of soda. As most, but not all, of your readers know, centigramme is the term which should have been used. As a complementary means, one to three grammes of caffein would be very satisfactory to the undertaker. Centigrammes or decigrammes might benefit the patient."

DR. SANDS HAS NOT RESIGNED.—We are requested to state that Dr. Sands has not yet resigned his professorship, but will deliver his didactic course next winter as usual.

DEFENDING ANTI-CHOLERA INOCULATIONS.—Dr. Cameron has written an able plea in the *Nineteenth Century* in favor of Ferrán's anti-cholera inoculations. He claims that there is some evidence to show that one attack of cholera gives some immunity against another. Gebert is the only authority who has maintained this view.

USE OF BOVINE LYMPH IN EUROPE.—Bovine lymph is to be permanently introduced in place of human lymph in Saxony, during the course of the present year.

CHANGES IN THE EUROPEAN UNIVERSITIES.—A number of changes and new appointments have recently been made in the medical faculties of the European universities. Some of these we have already mentioned. Dr. Josef Reinsberg has been appointed Extraordinary Professor of Forensic Medicine (to lecture in Bohemian) in the University of Prague. Dr. Anton Wölfler has been made Extraordinary Professor of Surgery, Dr. Mauthner of Medical Chemistry, Dr. Hofniski of General Surgery, and Dr. Ultzmann of Urology, at Vienna. Professor Merkel, of Königsberg, succeeds to the Chair of Anatomy of the late Professor Henle, at Göttingen.

THE TREATMENT OF MASTITIS BY REST AND COMPRESSION.—Dr. Paul F. Mundé, of this city, writes: "The letter by Dr. P. A. Harris, in your issue of August 22d, on the 'Treatment of Mastitis by Rest and Compression,' in which, among other things, he claims the priority of that method over Dr. W. F. Milroy, late house-surgeon to Maternity Hospital, New York, begins by a very evident insinuation that, because the date of my acceptance of his (Dr. Harris') article for the *Journal of Obstetrics* is but a few days in advance of the treatment by a similar method of Dr. Milroy's first case, I being then on duty at Maternity as visiting-surgeon, Dr. Milroy must have received the incentive to the method from me, therefore from Dr. Harris. Now, as regards the question of priority between Drs. Harris and Milroy, there can be no doubt that it belongs to Dr. Harris, without the slightest fear of dispute. But perhaps Dr. Milroy may have independently hit upon the same or a similar practice, and the object of this letter is to show that he undoubtedly did so, and to refute the insinuation that he received his inspiration second-hand from Dr. Harris through me. In the first place, I have no recollection of having mentioned the subject of the treatment of mastitis by any method to Dr. Milroy, either at Maternity or elsewhere. Secondly, my other occupations and the distance to Blackwell's Island have for several years prevented my attending to my duties at Maternity with the regularity required by the rules (for which reason I resigned the position last June); and hence I find by the visiting-book, which I have taken pains to have consulted on the matter, that I visited the Maternity only twice during April, once during May (15th), and not at all during June, 1884, although technically on duty. I could not, therefore, have communicated Dr. Harris' method to Dr. Milroy. At some time during the past spring, Dr. Milroy wrote me from Chicago, asking permission to publish the cases of mastitis treated by him on my service by his method, a permission which I cheerfully accorded him. This is all the connection I had with the matter. Justice to Dr. Milroy, as well as in a minor degree to myself, would seem to call for the above statement."

LONDON AS A GREAT MEDICAL CENTRE.—Dr. Wesley M. Carpenter, of this city, in a letter to the British Medical Association, calls attention to the opportunities which London possesses for becoming a great centre for advanced medical teaching. These consist in the great abundance of clinical material which so large a city must afford, the existence of a prosperous and wealthy corporation, the British Medical Association, which might take the matter in hand, and the fact that the Royal College of Surgeons has recently received an enormous sum of money which might well be used for purposes of advanced medical teaching. One thing is certain, that, if London does not do something, New York will. Already it is ahead in the matter of special and post-graduate instruction.

AFRAID OF FERRÁN.—Ferrán and his "caldos" are now viewed with dread and terror by all the towns where the Government ordered him to follow up his "preventive cholera inoculations;" so much so that, as soon as it became known he was to visit certain towns, the people rose with the Alcalde and Municipality, and prevented him from entering the towns. So it happened in Denia, which was to be his "centre;" also in San Matero, Oliva, etc.—Cor. *British Medical Journal.*

FATAL POISONING BY MORPHINE THROUGH A DRUGGIST'S MISTAKE.—A druggist of Hoboken, Mr. Am Ende, well known in this city as a conscientious and enterprising man, put up ten grains of morphine in powders, instead of quinine as prescribed. The powders were taken by two young ladies of Hoboken, and both died from morphine poisoning. Thereupon Mr. Am Ende took a poisonous dose of atropine. The incident bears its own moral: That the most careful can sometimes make the most serious mistakes. There is room for the broadest charity for Mr. Am Ende, as there is for the sincerest sympathy for the afflicted family.

DR. FRANK B. GALLERY, one of the prominent physicians of Rochester, died, on August 29th, from the effects of an operation recently performed on him. He was incapacitated from professional duty some time ago, and removed to the town of Greece, where he died. He was thirty-eight years of age.

THE NEXT ANNUAL MEETING OF THE AMERICAN PUBLIC HEALTH ASSOCIATION will be held at Washington, D. C., during the second week in December. Dr. Smith Townsend, the health officer of the District, is chairman of the committee of arrangements, and has already appointed his subordinate committees.

INTERNATIONAL MEDICAL CONGRESS MUDDLE.

THE following correspondence, sent to THE MEDICAL RECORD, will speak for itself:

BALTIMORE, August 31, 1885.

Apropos of the meeting of the Committee of Arrangements in New York this week, I enclose you a choice and unique bit of literature on the subject of the International Congress, in the shape of a circular and blank endorsement, sent to the profession here by our worthy representative, Dr. John J. Lynch. The circular takes a view of the defection from the new organization somewhat different from the *Journal of the American Medical Association;* for while that publication asserts, in its editorials, that the opposition is made up of a few discontented men, Dr. Lynch complains of the many who have resigned positions even in Baltimore. The endorsement is a cringing effort to secure allegiance to the fast-waning power of a totally unworthy and unpopular organization. Together with a copy of the circular and endorsement sent me, I enclose you a copy of my answer to Dr. Lynch, which, if you see fit, I should be glad to have you publish.

Very truly yours,

JOHN VAN BIBBER, M.D.

47 FRANKLIN STREET, BALTIMORE, MD.

(Copy of Circular.)

BALTIMORE, AUGUST 15, 1885.

MY DEAR DOCTOR: The resignation of many of the gentlemen in this city who were given positions on the various sections, etc., of the Ninth International Congress, to be held at Washington in 1887, by the Committee of Arrangements, which met at Chicago in June last, renders it necessary that I should be prepared to suggest names to fill these vacancies at the approaching meeting of the Committee in New York, September 3d, proximo. To do this I must know who approve of the action of that Committee and are prepared to lend their names and efforts to make the Congress a success, and who are not.

I beg, therefore, that you will sign the enclosed endorsement if you are prepared to support the action of the American Medical Association and its Committee, and return it to me by mail at your very earliest convenience. Very respectfully, etc.,

JOHN J. LYNCH, M.D.

1 S. BROADWAY, BALTIMORE, MD.

(Copy of Endorsement.)

The action of the American Medical Association, at its meeting in New Orleans in April and May, 1885, and the subsequent action of its Committee at Chicago, in insisting that only those who support the National Code of Ethics should become members of the Ninth International Medical Congress, to be held in Washington, D. C., in 1887, meets my hearty approval, and I will do all in my power to promote the success of the Congress.

——— ———, M.D.

(Copy.)

WEST END, August 29, 1885.

DR. JOHN J. LYNCH, Baltimore:

MY DEAR SIR: I beg leave to return to you the enclosed endorsement unsigned, and I take great pleasure in explaining my action to you. I do not consider that the New and Old Code controversy, which is a local one in New York, has any bearing whatever on the question of an International Medical Congress. In consequence of the "resignation of many of the gentlemen of this city who were given positions on the various sections, etc., by the Committee of Arrangements which met in Chicago in June last," I do not consider that you or your decimated committees represent the medical profession of Baltimore any more than Dr. Shoemaker and his associates represent the city of Philadelphia. The extent to which this simile may be carried must be a mortifying truth, not only to you, but to every member of the present Committee of Arrangements.

The fact that the most prominent members of the profession, in all the medical centres of the United States, have withdrawn from your organization cannot be considered a very high compliment in this country, but when this action is advertised, discussed, and criticised among the foreign members of the International Congress, your position becomes unenviable in the extreme.

As a member of the Section of Neurology and Psychiatry under the organization of Dr. Billings and his associates, my position was very clearly defined, and, under the circumstances which I have pointed out to you, I hope you will pardon me for not wishing to change my associations.

Although we live in the same city, I have, by some strange misfortune, been deprived of the pleasure of knowing you personally, yet believe me, my dear doctor, that in your present trying and mortifying position you have my most sincere sympathy. Very truly yours,

JOHN VAN BIBBER, M.D.

The following propositions are also offered from another source for consideration:

Two committees have been formed in relation to the International Medical Congress—which is legitimate?

It should be remembered:

1. That the American Medical Association Committee was invitatory as well as executory.

2. That the International Medical Congress accepted the invitation of this committee, and by resolution ordered it to make all the arrangements for the meeting in this country in 1887, by virtue of its inherent power under its constitution.

3. It follows that this committee became the organ of the Congress, and it was instructed to execute *its* will at its meeting in this country.

4. That this committee of eight had no existence, so far as the Congress is concerned, until the Congress created it.

5. That when formed it became the organ of the Congress, its controlling body in this country, to carry out its objects.

6. That so far as the Congress is concerned, this committee of eight was only one of invitation, and could hold no power from the American Medical Association to act for the International Medical Congress, a superior organization, created for scientific purposes, and without local politics.

7. That as a committee of the American Medical Association it was the duty of the committee of eight to report the result of its action to the body which created it, which having been done, it ceased to exist as an agent of the American Medical Association, because its creator has no power to act, as an association, for the Congress.

8. That the new committee of twenty-eight, added to the eight original members, does not exist, as the American Medical Association has no power to create such for the International Medical Congress.

9. That the committee of eight can resign as appointees of the Congress, *only*, by the consent of that body or its executive committee, and that it is still amenable to the Congress as its agent, and it is its duty to act as its representative and ignore the action of the American Medical Association entirely.

The appointees of the committee of eight still stand good.

Reports of Societies.

British Medical Association.

FIFTY-THIRD ANNUAL MEETING.

Held at Cardiff, on Tuesday, Wednesday, Thursday, and Friday, July 28, 29, 30, and 31, 1885.

REPORTS OF SECTIONS.

(Continued from page 248.)

SECTION OF MEDICINE.

WEDNESDAY, JULY 29TH—FIRST DAY.

DR. WILKS in the Chair.

In opening the Section DR. WILKS, as its President, read an address on

SOME CAUSES OF DISEASE AND ON SOME REPARATIVE AND DESTRUCTIVE PROCESSES.

He acknowledged himself as to some extent out of harmony with certain prevailing notions, and was, in spite of many inducements to change, still disposed to abide by doctrines which he had been endeavoring to promote for the last thirty years. He then proceeded to dwell upon the difficulties of distinguishing between processes which are reparative and those which are only destructive, and gave interesting illustrations, from both a physiological and a pathological point of view.

DR. CUMING moved a vote of thanks to the President for his address, which was seconded by DR. W. ROBERTS, and carried by acclamation.

THE PRESIDENT acknowledged the compliment and immediately called upon the Section to proceed with the debate

ON THE TREATMENT OF RHEUMATISM.

DR. BRISTOWE opened this debate, according to programme. He said, when first asked to do so, he thought the subject had been fairly threshed out, but on further consideration he felt that the disease was so common that it was worth the while of practical men again to compare notes. He supposed, as he knew there was an impression abroad that he was very sceptical as to the use of drugs, an impression which he admitted was perhaps deserved, that it might be intended to extract from him some admission as to an acquisition of further power over the disease. He confessed, however, that he had nothing new to communicate. He had seen no mode of dealing with acute rheumatism, and he had no manner of faith in any power of controlling it by drugs—at any rate until the last few years. He had used, as at one time so popular, nitrate and bicarbonate of potass, but he had not been impressed with the possibility of this method being curative. Then he had used blistering, after the plan of Dr. Herbert Davies, and his experience of this treatment impressed him with the belief that it did benefit the joints, but did not curtail the inflammation of those joints. Next he had tried a formula propounded by Dr. Peacock, and for some years a favorite one at St. Thomas'. It contained several drugs, including iodides, bicarbonates, colchicum, etc. He supposed this might act after the manner of a blunderbuss loaded with a variety of shot, and if a patient had a little gout in his constitution, or a little syphilis, the doses might do him a little good in such respect. He confessed, however, that he had never seen this treatment influence the progress of a case of acute rheumatism. Then came the salicylates, and in adopting them he perhaps did so without any enthusiasm. In fact he lagged behind, as he generally does, with regard to new remedies. He is content to wait while a good deal of evidence accumulates, and then, of course, as a teacher, feels bound to try them. So here he waited, he lagged behind, but there is this he must say, that having eventually begun to use these salicylates he has not given them up, and this he cannot say of any other drugs.

In regard to his conclusion, perhaps he still lagged behind many more enthusiastic physicians who regarded the salicylates as specifics for rheumatism as much as quinine is for ague, or iodides and mercurials for syphilis. As to statistics, we ought to remember that in comparing them the items or integers are unequal, and with every effort to equalize them we cannot obtain perfect mathematical solutions to clinical problems. He found, however, that salicylate of soda or salicylic acid reduced the temperature in two or three days to normal. As the temperature falls the pain abates, but the affection of the joint lags behind. This, however, he considered only natural. What could be expected? A damage had been done—more or less effusion had been poured out—and time was required to repair the injury. Dr. Bristowe next turned to the cardiac lesions. Does the tendency to heart disease disappear? he asked. There was, he said, much difficulty in answering this question, and the remark he had made as to statistics must be applied here. He held in his hand the statistics compiled from his hospital case-books, but would not read them, as that would be tedious [applause], and they would appear in due course in the *Journal*. He would, however, state that they were highly favorable to the treatment. It had been said that relapses are not prevented, and some said they were more frequent after salicylates. He knew that relapses did occur, but not more than we find in other diseases after what we call specific treatment. He thought the relapses were possibly not more than those of ague after quinine, syphilis after mercury and iodine, or psoriasis after arsenic. In these diseases, especially the last, the drug is continued after the tendency to recur is apparently gone, but they do recur after this, and, moreover, when the system is, so to say, saturated with the drug, which should prevent relapse. Then in rheumatism there is a natural tendency to remit the salicylates. With the fallen temperature the patient feels so much better that he thinks he ought not to take more medicine. He wants to get up and leave the hospital, and the medicine is often remitted too soon, and relapses ensue; noises in the ears, deafness, delirium, and some other temporary ills might occur, but he had never known any real danger or had any cause for anxiety. As soon as convalescence was fairly established he fed his patients up. As to the nature of rheumatism and the influence of the drug over it, there were indications that it might be analogous to malaria, and Dr. Maclagan's work showed that there was much to be said for this view, which was in reality the one that led Dr. Maclagan to the discovery of the value of salicylates. Before closing his remarks he wished to add that he had this week had two cases in St. Thomas' over which salicylate of soda had no influence, but this might be attributed, he thought, to the fact that they were perhaps not really cases of true rheumatic fever. In one the inflammation was confined to one knee, and he was now inclined to regard the case as one of synovitis only. The other was a case of hyperpyrexia, which proved speedily fatal.

DR. SIDNEY COUPLAND said he had no doubt that the salicylates afforded us the best remedy, but he felt it was too much to call them specific, for they had no effect whatever on the cardiac part of the disease, by far the most important part. They reduce the fever and ease the pain, and this to such an extent that we now need seldom give opium. He gave smaller doses now than in his early cases, but he did not discontinue the medicine for a week or more after all symptoms had disappeared. The doses might be reduced, but the drug ought not to be omitted. He felt sure relapses were due to early getting up, the exposure thereby occurring, and to the solid food, which was permitted too early. In some cases of failure he had observed that there was a suspicion of gonorrhœa having lately occurred, and the salicylates were powerless in gonorrhœal rheumatism. He thought, too, he had noticed other diseases of the genito-urinary tract complicating obstinate cases, and he

suggested it might be well to inquire how far inflammation of this membrane, however arising, might be associated with rheumatic attacks.

Professor Latham said he had no belief whatever in germs as the cause of rheumatism. If the disease were produced by microbes, how was it cured, as it used to be, by bleeding? Did the blood drawn reduce the number of organisms? and were we to conclude that a certain number of microbes produced rheumatism, but a few less were of no consequence? So purgatives, once in general use, would cure the disease. Did the evacuations carry away a few of the extra bacteria and leave their friends so reduced in numbers as to be powerless for harm?

Again, did opium put the bacteria to sleep? If we cut across the spinal cord we at once get excessively high temperature, but it is not held, surely, that the operation instantly develops swarms of bacteria which give rise immediately to hyperpyrexia. What was rheumatism? Why do we see from the same causes pleurisy, pneumonia, catarrhs, rheumatism, and other diseases. Could it be held that all are due to germs or organisms always surrounding us? The fact was, he felt that this doctrine of bacteria had been carried too far. The old lactic-acid theory was much nearer the truth—indeed, very near it, as he had shown in recent publications. Cold applied to the surface modifies the circulation and therefore the nutrition of muscular tissue. What, then, is the relation of muscle? what that of albumen to lactic acid? The chill affects the nutrition and the successive changes in which cyan-alcohol, glycocine, lactic acid, and uric acid appear are interfered with. By giving purgatives, very little animal food, and saturating the system with salicylic acid, not stopping short of producing toxic symptoms, we could inaugurate a new series of changes. Lactic acid had much to do with the disease but was not the body on which salicylic acid directly acted. Rather it was excessive formation of glycocine and uric acid in the tissues that set up the symptoms, while the salicylic acid cured by combining with their antecedents and so preventing their formation. He had endeavored to show that albumen is a compound of cyan-alcohols with a benzene nucleus. The cyan-alcohols had been prepared in the laboratory except the lowest of the series, $CH_2\begin{cases}OH\\CN,\end{cases}$ which requires for its preparation formic, or methylic aldehyde, but this has not yet been isolated. From cyan-alcohols corresponding amido bodies had been combined. Therefore we might expect that by treating $CH_2\begin{cases}OH\\CN\end{cases}$ with NH_3 we should get a cyanamide $CH_2\begin{cases}NH_2\\CN.\end{cases}$ This last, when hydrated, would form amido-acid glycocine. From the same cyan-alcohol attached to a benzene nucleus he held creatine to be formed, and by further changes, urea and the next cyan-alcohol higher in the series, $CH_2,CH_2\begin{cases}OH\\CN.\end{cases}$ Then by hydration of this, as well as $_1CH_2,CH\begin{cases}OH\\CN,\end{cases}$ lactic acid would be formed. Again, the same antecedent $CH_2\begin{cases}OH\\CN\end{cases}$ might combine with salicylic acid in the liver. There, if combined with cholic acid we might have glycocholic acid formed, which by alkalies is converted into cholic acid and glycocine.

$$CH_2\begin{cases}OH\\CN\end{cases} + C_{24}H_{40}O_5 = C_{26}H_{43}NO_6.$$

Methene cyan-alcohol. Cholic acid. Glycocholic Acid.

Now, if salicylic acid combined with the methene cyan-alcohol we should have a formula of the same character as is held to be represented by the molecules of living albumen,

$$CH_2\begin{cases}OH\\CN\end{cases} + C_6H_4\begin{Bmatrix}OH\\COOH\end{Bmatrix} = \begin{matrix}CH_2\\C_6H_4\end{matrix}\begin{cases}OH\\CN.OH\\COOH.\end{cases}$$

As it combined CNOH would become CONH, and the salicylic acid would be converted into salicyluric acid. Amid some manifestations of impatience Dr. Latham, who had provided no diagrams to assist in following his formulæ, concluded by saying that salicylic acid might prevent the formation of glycocholic acid, and consequently of glycocine, and thus prevent the formation of uric acid and lactic acid. His views would be published in extenso.

Dr. Prosser James said he would not attempt to follow Professor Latham's interesting views, which required study at leisure, but begged to recall the attention of the Section to the subject announced for the debate, which was the treatment [applause] of acute rheumatism. He had, he said, too much reason to feel the scepticism attributed to and confessed by the opener of the debate, Dr. Bristowe, but he was not altogether devoid of faith in drugs, and had himself derived from them very great relief.

Dr. James said he had had a very painful personal experience of various methods of treating acute rheumatism, for he had had several severe attacks, and as a sequel he now suffered from osteo-arthritis. Some authorities, indeed, held there was no connection between the acute and chronic diseases mentioned. His own case pointed in the other direction. No question as to the diagnosis could arise. He had the happiness of numbering among his friends the survivors of his former teachers, most of his colleagues, and many other eminent physicians, whose sympathy and desire to help had been as welcome, and perhaps as effectual, as their advice. They were of one opinion as to the nature of the early attacks. Since the chronic disease succeeded he had also experienced the usual relapses. He had been under treatment by alkalies, by salines, by opiates, by quinine, by the salicyl compounds, by blistering, by rest in bed *without* peppermint-water, and so on, and would just state his experience of some of the remedies. As to nitrate of potash and other salines, he had been unable to satisfy himself that these drugs exercised any influence over the progress or duration of the disease, and the same remark applied to some other modes of treatment which had been advocated.

Passing to treatment which gave him relief, he spoke first of opium, and commended small doses of morphia—preferably by subcutaneous injections. Only just enough to numb the pain—to render it, as it might be said, bearable—should be given, and then it could be continued for some time, if required, without any need for increasing the dose. It was not necessary to narcotize the patient. When the pain abated, sleep often ensued. Small doses did not disturb the functions, nor create a desire for repetition, but they exercised a most soothing influence over the nervous system which reduced the intense agony to a more endurable pain.

Dr. James next spoke of alkalies. In his first attack, which occurred at the time when the alkaline method was most in favor, the treatment was begun with alkalies, administered so as to speedily render the urine neutral. This neutrality was maintained for several days. As no effect was produced on the disease, no relief to pain or any other symptom, opiates were given, and the amount of alkalies reduced. Speedy return of excessive acidity and some increase of fever induced his advisers to urge fuller alkaline treatment. This was accordingly pushed to what was deemed the limit of safety, after which small doses were given from time to time on the appearance of excess of uric acid or urates. The impression produced was just that which he had always entertained—that alkalies were most useful at the commencement of an attack, that they should not be pressed beyond the point of neutralizing the urine, that the neutrality might be maintained with advantage for a day or two, and that then alkalies had accomplished all they could do, except as occasional correctives. Employed in this way he had no fear of their producing anæmia or debility. Even in chronic rheumatism small doses of alkalies at intervals

may be called for to correct digestion or for other purposes. Perhaps the best alkali for the purpose was lithia, the dose being small and the solubility of its salts great.

The late Dr. Billing taught that rheumatism is a neurosis and should be treated by quinine, and watched with much interest the effect in his (Dr. J.'s) case, as he had himself suffered in the same way and derived great benefit from quinine. A continual state of cinchonism was maintained for weeks, a consumption of twenty-seven grains daily being required for this. The antipyretic effects of the remedy were distinct and unvarying. Lessening of this dose was always followed by an increase of temperature and of the rapidity of pulse.

As the disease abated the dose could be lessened without so marked an increase of pyrexia, but until convalescence set in, every diminution was followed by a rise in the pulse and the thermometer, so that an accidental omission of a pill would leave its record on the charts. Certainly the remedy pushed to a moderate degree of cinchonism had afforded him material and constant relief, and had given rise to no material or important inconvenience.

In a subsequent attack salicin was tried. Its effect resembled that of quinine, but was much less marked. It seemed adapted only for acute attacks, and should be used at the outset and pushed in large doses. In the chronic cases it seemed almost useless. But in one severe exacerbation or intercurrent attack it had afforded him some relief, checking pulse, temperature, and pain; but it had to be taken in fifteen- or twenty-grain doses every two hours to secure this, and once in thirty-grain doses. The safety, the even tonic influence, of these doses gave it the preference to the other salicyl compounds. Noises in the ear and other symptoms, such as we see in mild cinchonism, soon come on under large doses of salicin. Constipation, too, he found apt to occur, and requiring to be corrected.

He regarded salicin as superior to the other salicyls, as he had never known it give rise to dangerous symptoms. He thought its effect more similar to that of quinine. It was tolerated by the stomach when the other salicyls were rejected. He had used it ever since its reintroduction, for, as he had shown elsewhere, it had long ago been employed, but long fell into disuse. In fact, the willow was a popular remedy from early ages. The Greeks employed it, and more than a century ago it was treated of as a febrifuge and as what we should now call an antipyretic. Salicin was an early substitute for quinine, but the larger doses required rendered it more costly, for which reason probably it was too soon laid aside.

Dr. W. R. Thomas said we were too much influenced by fashion. He had not found salicin a grand remedy in all cases. We ought to select our cases. He had been accustomed to reckon three varieties of rheumatism, viz., sthenic, asthenic, and gonorrhœal. In the sthenic form he relied on carbonate of potash. In the asthenic cases he would trust to salicin, and after this discussion to quinine. The third form required different treatment.

Dr. Markham Skerritt said there were two sides to the question of salicin; for while some cases improve at once, in others the disease would hold in spite of salicylate of sodium, which was the salt he usually preferred. The more acute the case, the higher the initial temperature, the better was the salicylate of sodium. In subacute cases it was of much less use. He lessened his doses as the disease gave way, but he went on with the salt until the temperature had been normal for a few days, and then he gave iron, selecting the most astringent preparation which the patients could tolerate.

Dr. Pavy had not intended to speak, but the interest of the debate induced him to add his opinion of salicylates. He found the more acute the disease, the more generally it was distributed; the greater the number of joints involved, the more likely was salicylate of soda, which he most used, to serve. But it has not the influence over complications that it has on the disease. It could not cut short either endocarditis or pericarditis; it was not a remedy for complications. The temperature and pain were soon relieved, but we must then go on with the remedy for twelve or fourteen days, or relapse would very likely occur. The effect only controlled the disease; it did not cure.

Dr. Harker insisted on the value of the clinical thermometer. He had found salicin and quinine most useful, and could endorse what a previous speaker had said in regard to these most important antipyretics.

The President, in closing the debate, said all seemed satisfied that we had a new remedy of late years. No one had seen a case cured in twenty-four hours before salicin was used; but relapses seem to occur oftener, and so our cases go on again. His clerk at Guy's had collected the records of hundreds of cases, and found that, on the whole, patients seemed to remain in hospital about the same time as formerly.

At the conclusion of the debate on rheumatism the papers were proceeded with.

Dr. L. D. Bulkley, of New York, read a paper on

ASTHMA, AS RELATED TO DISEASES OF THE SKIN,

in which he gave statistics of his hospital practice, showing how often asthma had occurred in a patient suffering from various forms of cutaneous disease.

Dr. Byron Bramwell warmly thanked Dr. Bulkley for coming so far to state his experience, and briefly stated the gist of a paper he had down upon endocarditis, and promised a demonstration for the next morning.

Mr. C. R. Straton read a paper on "Chorea," giving an account of his views on this disease during what he termed its pre-choreic stage.

The time having expired, and a garden party being arranged, to be followed by a conversazione, a number of other papers were taken as read, and the Section adjourned.

Thursday, July 30th—Second Day.

From ten to eleven o'clock in the morning Dr. Bramwell gave a series of demonstrations on "Ulcerative Endocarditis," and at half past eleven Dr. Pavy gave demonstrations on the "Clinical Examination."

At two o'clock in the afternoon The President took the chair, and at once called upon Dr. Pavy to open the discussion which had been arranged on the clinical aspects of glycosuria. Thereupon Dr. Pavy proceeded to read a long paper, occupying a full hour in the reading. He found the disease most common between the ages of forty and sixty years. It was more common in persons of Jewish race than among Christians, and, also, it was more amenable to treatment. It was often very insidious in its approach, but sometimes it would set in very suddenly. He had known cases in which no suspicion had been entertained of unsound health for a considerable time after the disease commenced, and he had been able to prove this. Persons who wear black-cloth trousers, such as clergymen, sometimes remark the difficulty of brushing out certain white spots, and he had heard it stated that the porters in French hotels could recognize patients with glycosuria by the extra trouble of brushing their clothes. In micturating against a wall some of the urine was splashed on the trousers, and on drying the sugar was left forming the white spots in question. He had remarked that many of these patients display an intense congestion of the membrane of the mouth and throat, and he had come to consider this as a marked sign of glycosuria. The disease might endure for years. This was oftenest the case in elderly persons, but it might happen also in the young. Sometimes it disappeared entirely. He did not mean it was kept under control, but that it was eradicated. Sometimes sugar appeared, but only temporarily; then the red condition of the

mouth was important. He saw a case with this, and on testing the urine found sugar, but though often tested for afterward, there was none. Diabetes insipidus and mellitus might coexist. The quantity of urine was in such cases without any definite proportion to the amount of sugar. Some patients perspired on one side only, and this, he thought, showed that the state of the skin was associated with the condition of the nervous system. Diabetes occurred in association with enlargement of the liver, and such patients might go on for years with no other ill-effects. Perhaps the enlargement might be considered compensatory. Neurotic conditions, especially spinal, coexisted with glycosuria.

Sometimes ataxia came on first, sometimes diabetes, and so we might feel sure they are associated. Patients would say they had sciatica or gout. Others that they could not feel properly in their legs. One told him that he felt as if he had got a twenty-pound weight on his feet, another as if his boots were too large. Darting or lightning pains were also complained of. There was increased sensation of the skin, the hyperæsthesia being shown by pinching. In other cases the pain was deeper and said to be felt in the bones. He had known a seam in the dress complained of as causing pain so as to prevent the patient lying down. The pains were worse at night, so often that there seemed a direct connection between the time and the symptom. Sometimes the pains attacked the arms instead of the legs. Exophthalmic goitre and glycosuria often occurred together. As to acetonæmia, he did not believe in it. Of course he knew that diabetics might die comatose, and this was sometimes called "Kussmaul's coma." He did not know why, ever since 1874, it should be so called; for our countryman, Dr. Prout, had long before described it. Whatever greatly affects the patient may bring on this complication. Grief, distress, fatigue, and other causes would do so. He had seen the first indication of its approach in his consulting-room, when the patient had come a journey and was naturally anxious, and in a day or two he was dead. Vomiting would also bring on the coma, which he attributed to exhaustion of the nerve-centres. Rapid pulse and breathlessness were suspicious symptoms. The patient might complain that he could not get air enough. A little later drowsiness would come on, and the end was near. Fatty emboli had been much spoken of; they were purely physiological, as he had long ago shown in his lectures on physiology, and fully accounted for by the food. Albuminuria sometimes coexisted. In small amount this was not of much consequence, but sometimes it passed into Bright's disease.

Dr. Skerritt read the report of a case of febrile glycosuria of an acute kind, and he said he had found that febrile attacks diminished the amount of both the sugar and the water. Sometimes when febrile diseases exist, sugar would entirely disappear. Again, glycosuria might set in quite suddenly, as if it had been set up by the febrile disorder.

Professor Latham commented on the association between diabetes, gout, and rheumatism, and said that the condition of the nervous system might set up either of the three. In gout there was less irritability of the sympathetic, corresponding with the advancing years, in which the disease is most observed, and so we get glycocine. But in the sensitiveness of youth the oxidation did not go so far, and so we had rheumatism. If oxidized less diabetes ensued, which he regarded as the analogue of muscular rheumatism, while acetone was the analogue of hyperpyrexia.

Dr. W. R. Thomas maintained that the first consideration was diet, as inattention to this had first brought on the disease. In patients of full habit diet was most urgent, and yet they were most difficult to manage. The results of experiments confirmed this view. When syrup was injected into a rabbit's stomach after a meal it was not quickly absorbed into the system, but retained by the large quantity of vegetable matter, which did not give it up so rapidly as to incommode the liver. But when the same experiment was made on dogs, the sugar was rapidly absorbed—too rapidly for the liver to convert it into glycogen—and therefore glycosuria ensued. We should therefore give plenty of vegetable food, and at the same time alkalies. The neurotic variety of the disease was often seen in men of business who were greatly preoccupied and persons who worry. A sea-voyage then is a good thing, and he had known one case completely cured by it. Bromide of potassium should be given at night to produce sleep, arsenic regularly as a tonic, and opium occasionally to check the excessive excretion of sugar. Exercise should be taken to divert from the brain.

Dr. Savage was not able to be present, but he sent a note of apology, in which he stated that the insane did not often suffer from glycosuria, but that he had seen several cases in which there had been an alternation between the two diseases.

The President remarked that he did not believe that the coma was due to acetone. One speaker had said he did not believe in acetonæmia. Why, then, did he use the term? He protested against such a use of words. Kussmaul's name had also been used, and confessedly without reason; he would be glad to see all such names discarded; they were very inconvenient.

Dr. Pavy replied. He said he thought it was the liver, whose disordered function made the changes; but it was the nerves presiding over that function which caused the disease.

This closed the discussion, and the papers were then proceeded with.

Mr. Lockhart Stephens then related a case of simple stenosis of the œsophagus. A bougie encountered the obstruction at a distance of fifteen inches from the front teeth. The disease went on to a fatal termination, and on post-mortem examination the diagnosis was confirmed. The specimen was handed round, and the stenosis was seen to be of small extent, but to almost completely close the gullet, a glass rod about the size of a crow-quill being passed through.

Mr. Stephens also exhibited a specimen of congenital heart-disease and gave its history.

Dr. W. R. Thomas read a short paper on

THE INFLUENCE OF MALARIA ON THE PROGNOSIS OF OTHER DISEASES.

He had in Sheffield constant opportunities of observing that many diseased states were complicated by malaria, which was a frequent cause of anæmia and many other obscure maladies. In several diseases it would be found useless to treat merely by nourishing up the patient so long as he remained in a malarious district. If, however, the patient were sent to a high altitude, and at the same time were treated with quinine, a cure was not unfrequently rapidly brought about.

Dr. Wilks mentioned the case of a practitioner who used to give quinine in almost all cases of disease.

Dr. C. R. Drysdale read a paper

ON THE HYGIENIC TREATMENT OF PHTHISIS.

He said he had always believed in the unity of phthisis, and likened that disease in many ways with syphilis, so that the idea that it is a germ-produced disease seemed to him quite tenable, although not so clearly made out as Dr. Germain Sée would have the medical world believe. Whether, however, phthisis be a disease resembling syphilis or not, it is most fatal under all treatments, nor have we at the present moment any special remedy which exerts any marked influence on this malady, as we have in mercury and iodine in syphilis. Some thirty years ago consumption was believed by most men of experience to be quite incurable. A friend told him that Dr. Stokes used to say he had only had one case where the patient recovered from a well-marked attack of the disease. Modern physicians are far less despondent.

To take, for instance, the evidence of Dr. Austin Flint, we find that physician saying, at the Philadelphia Congress in 1876, that he had known of seventy-five examples of arrest of phthisis in a practice of thirty-eight years. All those who have of late years watched carefully their private cases of consumption, have been occasionally delighted to find that the disease is not necessarily so fatal as our predecessors thought. At the Worcester meeting he had heard of several eminent medical men who had themselves been consumptive, and had had a long arrest or cure of the disease. Such cures or arrest, too, took place under a variety of circumstances, and almost led to the view entertained by some, that the benefit derived from a change of climate in consumption is due not so much to climatic influence *per se*, as to the circumstances incidental to the change. Yet, in his experience, change of climate was by far the most important adjuvant in treatment. Long sea-voyages were excellent in many respects, and objectionable in others. The air on deck was pure and salubrious, but in the cabins far from wholesome. Sea-sickness was by no means uncommon among consumptive patients, and greatly added to their sufferings in rough weather. Life at sea was dull and monotonous; the society apt to be limited and unsuitable to the patients, and heart-burnings and squabbles might embitter his existence. Sailors, who were often so miserably lodged, when attacked with consumption, quickly succumb, and thus it was a mistake too often made, and of which he had sometimes been aware of too late, to send a patient, especially a lady, on a long sea-voyage. At the same time, when the ship was well appointed, and the berths roomy enough, a voyage to Christ Church, New Zealand and back, setting out from England in October and returning by Cape Horn in May next year, was a splendid feat in modern hygienic therapeutics, and sometimes arrests or cures the disease. There can be no doubt that various climates contain some of the requisites for the arrest of phthisis in varying degrees. These are absence from damp soil, asepticity of the air, and dryness and diathermancy of the atmosphere. Egypt, in the region of Cairo, was, on account of its dryness and warmth, an excellent winter resort for consumptives, who do not bear the cold well. The Riviera affords several agreeable winter resorts on the Mediterranean. Of these San Remo is commended by P. James; Dr. Hérard spoke most warmly of Algiers, which, he said, had arrested consumption in several able Parisian medical men. To those patients, however, who were not too much affected by cold weather, and who are in the first stage of phthisis, his experience, as well as theory, and the observation of many accurate observers (Weber, Denison, Williams), made him give the palm to residence in the Alpine districts of Europe or of the United States. The air was so pure in mountain valleys over four thousand feet in altitude in Switzerland, or a little higher in the Rocky Mountains, that, in the first place, the germs which caused putrefaction were absent, and the sun's rays were warm, even in January. If, then, the patient came to him in the early stage of the disease, before softening had taken place, he would send him at once to Davos, if in good enough circumstances, even in January. One gentleman this year went thither on January 2d, and returned wonderfully well in April. If the patient had to earn his own living—the lot of the vast mass of mankind—he advised him to go to Colorado, and, if possible, get some out-door employment in looking after cattle. This was very clearly curative in many instances. When these plans could not be carried out, we had still a resort to the Mediterranean shores, and a winter cruise in that sea for the well-to do. The workers should leave cities and work at out-door employments in the country. In this way a cure or arrest occasionally ensued. Life out-of-doors was obviously the best tonic in consumption, and cities are the hot-bed of the disease, which seemed rare in dwellers in mountain districts employed out-of-doors. The physician must not look on phthisis as incurable, but incite his patient hopefully to struggle for existence.

Dr. Wilks said that medical men were the best cases to inquire into as to the arrest of phthisis, and many students he had known with the disease had recovered and were now well.

Dr. C. R. Drysdale then read a paper on

THE TREATMENT OF SYPHILIS AND THE ALLEGED PREVENTION OF TERTIARIES.

The treatment of syphilis is still much disputed. In Paris and New York long, interrupted, continued courses of mercury are in vogue in all cases; in Edinburgh some treat all cases of syphilis without mercury; in London there is no clear rule laid down, and M. Diday treats some cases with, and some without, mercury. Whom shall we pin our faith to? By far the most important point in the treatment of the early stages of syphilis refers to the possibility of warding off the tertiary stage by the administration of courses of mercury. As a general rule, it may be said that any given case of primary or secondary syphilis may possibly come to the stage of tertiarism or gummy deposit. Diday asserts that when the early eruptions are light in color we may expect that tertiary symptoms will be absent; but in London and elsewhere this assertion has been adversely criticised, and the contrary opinion has even been put forward, *i.e.*, that slight syphilis at the outset is more apt to end in tertiaries than a copious eruption is. Few will now be found to endorse the opinion of the late Professor Hughes Bennett, that the chief cause of tertiary syphilis resides in over-dosing with mercury. Syphilis, of itself, it is now well known, is quite powerful enough to commit grave tertiary ravages. The very contradictory of that proposition, indeed, was maintained some years ago by M. Ricord at Birmingham, and has lately been restated by his eminent pupil, Dr. A. Fournier, of Paris. In a passage in *La France Médicale*, of May 23, 1874, M. Fournier thus speaks: "The chief cause of the passage of syphilis into the tertiary stage is doubtless the absence or insufficiency of treatment. . . . The consequences of expectation in syphilis are truly disastrous." Mercury, according to Fournier, acts on the poison, and ninety-five per cent. of well-treated cases under mercury will, he says, prove mild. Some English authors of repute, such as the late Mr. Solly, think that mercury given while the hard sore exists, may cause the disease alone. Mr. Henry Lee and Mr. Jonathan Hutchinson also speak in this way. Lancereaux again ("Traité de la Syphilis," 1873) denies that mercurial courses can ward off tertiarism, or the eruptive state, when given during the existence of the hard-sore. He puts it that it is bad enough for a patient to have syphilis without making of it a pretext of a treatment by mercury for years, since, after all, he says mercury is a very poisonous drug. A large number of syphilitics, he adds, get well without any remedy at all, and Lancereaux therefore concludes that mercury should only be given to treat eruptions, iritis, or other symptoms when present. Diet and regimen, which are so useful in other diseases, may be called in also to prevent relapses in syphilis. M. Mauriae, the able successor of M. Ricord at the Hôpital du Midi of Paris, holds the very same views as those cited from Lancereaux. Dr. Schumacher, junior, of Aix-la-Chapelle, sent me, a short time ago, an article of his on some recent experiments of M. Diday, of Lyons, on syphilis. These concern 74 cases of the disease treated by that gentleman between 1872 and 1882. Of these 49 were treated without mercury, and 25 with it. Diday concludes from these that mercury does not prevent the supervention of secondary symptoms, it does not seem to prevent the relapse of secondary eruptions. The disease is usually a mild one, and he seems to think the occurrence or non-occurrence of tertiaries is to be predicted by the severity of the case at its commencement.

Dr. Schumacher says that all cases which come to

Aix-la-Chapelle are grave syphilis, and therefore all require mercurial inunction for their cure. Dr. Edward Keyes, of New York (International Congress, 1876), is quite opposed to the view that mercury in small doses is injurious. On the contrary, Dr. Keyes holds that mercury is a tonic both to healthy and to syphilitic persons, and every case of syphilis should therefore be treated with long-continued courses of mercury, since prognosis is impossible. Mercury in small doses, he contended, increased the number of blood discs. He furthermore calls mercury an antidote to the poison of syphilis. Mercury is curative in all stages of syphilis, even in tertiaries, when iodide of potassium fails. Hence, Dr. Keyes gives mercury in small doses, as one-sixth of a grain of the green iodide, thrice daily, for three or four years; whilst Fournier leaves off the drug for a month at a time to resume it. The following propositions seem, in short, to be true, said Dr. Drysdale: The prognosis of syphilis is obscure. Mercury may be given in small doses without debilitating, and even in tertiary syphilis, now and then, in obstinate cases. Iodide of potassium is not of much use in early syphilis, but all-powerful in tertiaries. Mercury being a parasiticide is useful as a germicide in syphilis, but is rarely of much service in the tertiary period. Iodide of potassium is the sheet-anchor in tertiary disease, and should be given in doses of from five to twenty grains. It is not clearly proved that mercury given in the period of the hard-sore can ever prevent the appearance of secondary eruptions, alopecia, or iritis. Its chief use is to treat such symptoms when these are present. There is some evidence to prove that courses of mercury prevent tertiaries; but there is, on the other hand, much evidence against this view. Occasionally even tertiary symptoms are benefited by mercurial inunction, and in those where some affection of the nerves exists both iodide of potassium and inunction should be used. Finally, careful diet, climate, and other hygienic rules should be carried out in syphilis as well as in other chronic diseases, for the effect of time and régime is immense in all diseases where the system has been poisoned by some germ resembling that of syphilis; and above all, it must be borne in mind that experience has now shown us that syphilis at the present day is often a very mild disease.

Dr. Wilks asked Dr. Drysdale what his own actual treatment of syphilis was. He thought he had read some years ago that he had published cases of syphilis in infants which had recovered without any mercury.

Dr. C. R. Drysdale replied that at present he looked upon mercury as a parasiticide or germ-destroyer in the earlier stages of syphilis, and hence he had recently treated all his cases by small doses of mercury for periods up to a year or thereabouts, hoping thereby to prevent tertiaries. The cases mentioned by Dr. Wilks, of infantile syphilis treated successfully without mercury, were due to Mr. Allingham and Mr. R. W. Dunn. He himself had treated many cases of syphilis in adults without mercury, in most cases with good success, but in some tertiary symptoms supervened, and it was with the hope of, if possible, preventing these that he now gave small doses of mercury for a long time, like Dr. Keyes, of New York, and Dr. A. Fournier, of Paris.

Dr. Webster considered that the proper treatment of syphilis is the tonic treatment. He was in the habit of treating all his syphilitic patients with quinine, iron, and strychnia, and advising them to leave off all alcoholic drinks.

Dr. Payne, of London, said a large number of infants were treated with small doses of mercury for eruptions, which either were distinctly syphilitic or might possibly be so. The mercury never did any harm to the non-syphilitic cases, while it was extremely beneficial to the syphilitic ones. He would like dearly to get from Dr. Drysdale a clear definition of the term *tertiary;* and would also like to hear what is the cause of tertiary syphilis. Is it scrofula, or bad diet, or excesses, or what is it? In one case a young man with rupeal eruption did not improve in treatment as out-patient. He was taken into hospital and well fed, and rapidly got quite well.

Dr. Bulkley, of New York, thinks that syphilitic eruptions are better studied in skin-disease hospitals than anywhere else. He had abandoned the term tertiary, because the lesions which were supposed to belong to the late period of syphilis were occasionally seen early in the disease. He agreed with Dr. Drysdale that no one of any experience would endorse Professor Hughes Bennett's view, that tertiary syphilis was a product of syphilis and mercury, at least in modern times. When salivation was in vogue it might possibly have acted as a cause of that period. He agreed with Dr. Webster that patients with syphilis should neither drink alcohol nor use tobacco. His patients were quite debarred from the use of either. There was one point in the treatment of syphilis, and that was that it should not always be treated merely by mercury and iodide of potassium. The patient must be treated in every case. It is not necessary to give much mercury in the early stage of the disease; but if iritis occurs the dose should be raised, and iodide of potassium had occasionally its uses in the early period of the disease. He entirely agreed with Dr. Keyes' views as to long courses of small doses of mercury for two years or more daily. Dr. Drysdale had said that he was astonished at hearing from Dr. Henry, of New York, that some physicians in the States gave three hundred grains of iodide of potassium daily in bad cases. This was by no means the largest doses, for some gave two drachms of the salt five or six times in the twenty-four hours.

Dr. Rabaghate, of Bradford, said some cases of syphilis appeared to him to be quite incurable, and he mentioned a case which he had treated for a long time for ulceration of the feet, which would not be healed by blue pill, iodide of potassium, or any other remedy. He had not, it was true, tried Aix-la-Chapelle. Some syphilitic ulcers would heal up to a point and then suddenly break down. He sometimes thought there might be variations in the virulence of syphilis, as there was in the seeds of other diseases.

Dr. Rabaghate, of Bradford, made a criticism of the late work issued by the Royal College of Physicians of London, on the nomenclature of disease, which he considered was faulty in its classing such diseases as hydrophobia in a wrong group. That disease should be placed along with syphilis and the exanthems.

Dr. Payne defended the work. It had been issued in the same way as a dictionary, *i.e.*, to give an expression to the present use of medical language, not to make a new one.

Dr. Wilks also defended the work. It was, of course, absurd to place apoplexy in the class with diseases of the nerves, because it was a disease, not of the nerves, but the vessels; but still that was the usual way in which it was described, and the use of nomenclature was for describing the disease as known to the bulk of medical practitioners.

The Section then adjourned.

Quinine in Greece.—The Grecian Government has become alarmed at the increase in malarial fevers among the inhabitants of that country, which investigation has shown to be in a measure due to the poor quality and high price of quinine. It has therefore removed the duty from this drug, a measure which has already led to a reduction in its price, and has further determined to withdraw its sale from private hands and confine it entirely to government stores. It will buy only from the best and most reliable makers and sell at a very slight advance above the manufacturers' price, sufficient to defray the cost of transportation.

THE PRACTITIONERS' SOCIETY OF NEW YORK.

Stated Meeting, June 5, 1885.

ALONZO B. BALL, M.D., PRESIDENT, IN THE CHAIR.

DR. BEVERLEY ROBINSON presented a patient, a woman, thirty-five years of age, married, who came under his observation at the out-door department of the New York Hospital, April 25th, when she said that for five or six months previously she had been scarcely able to breathe through her nose, she could scarcely sleep, and had apparently asthmatic trouble dependent upon the nasal affection. There was complete loss of smell, and the voice had nasal intonation. No air could be forced through the right nostril, and only a very small amount through the left. Dr. Robinson used Dr. Weir's gouge-forceps on the right side, and removed as much of the septum as he could tear off readily, and since the operation the patient had been considerably relieved. In these cases such an operation was not always necessary to obtain a cure, because there was considerable granulation tissue which could be removed by cauterization and other means milder than the use of the forceps. As occurs in all these cases after such an operation, there was a tendency on the part of the passages to close up somewhat, and the patient wore a rubber tube for four or five days. Dr. Robinson had also been obliged to cauterize the granulation tissue a few times, and also to apply monochloracetic acid.

The case was also interesting in the fact that the patient had not at any time suffered from impairment of hearing, although there had been nearly complete obstruction upon one side and complete upon the other. Again, she had not seemed to be very much annoyed with catarrhal trouble from the condition of the nasal mucous membrane, which, as a rule, was present under such circumstances. Furthermore, the asthmatic trouble had been very much improved. By means of cauterizations and the application of the acid, Dr. Robinson hoped that recovery might be completed without further use of the forceps.

The case was also interesting in the fact that while little or nothing was done in the left nostril, through which she could before scarcely breathe, at the present time she could breathe more freely through the left than through the right nostril, and the explanation which Dr. Robinson gave was that the tissues taken from the right side allowed the septum to fall toward the right, and in that way open up the left nasal passage.

The operation was performed under the local application of a ten per cent. solution of cocaine, which diminished the pain a good deal, although it did not remove it entirely. No perceptible effect was produced on the amount of the hemorrhage, and it was quite profuse.

DR. A. A. SMITH asked if there was any impairment of taste.

The *patient* responded that taste seemed to be impaired, as it seemed to her at times that she did not taste anything.

DR. ROBINSON further remarked that he did not regard the use of the burr and the dental engine as at all necessary in the treatment of such cases, and that the forceps were just as useful and much more easily obtained.

DR. A. A. SMITH directed attention to

THE SKIN ERUPTION AFTER THE USE OF ANTIPYRINE,

and asked if any of the members had observed cutaneous eruptions after the use of this drug.

THE PRESIDENT had seen very marked effects from it in one case, where the entire body was covered with a profuse, fine, papular rash, looking very much like the ordinary heat-rash. He thought it was by no means uncommon to see skin eruptions following the use of antipyrine.

DR. SMITH said that the eruption to which he referred consisted of large red welts, elevated above the surface, with perfectly white skin between them, resembling the urticaria which comes from taking quinine or eating shell-fish, and first appearing upon the extremities. In the first case in which he had noticed this form of eruption the patient had taken forty-five grains. In that instance the eruption was rather a purplish red, and looked not unlike that of measles, which began upon the upper extremities and extended over the entire body. At the same time, in the cases which he had noticed, perspiration was quite active.

DR. SAMUEL SEXTON then read a paper entitled

CATARRHAL INFLAMMATION OF THE HEAD, AND ITS EFFECT ON THE MIDDLE EAR.

The Society then went into executive session.

Correspondence.

OUR PARIS LETTER.

(From our Special Correspondent.)

DR. FERRÁN'S EXPERIMENTS—THE BLIND TO TAKE PART IN TELEGRAPHIC WORK—ESTABLISHMENT OF MORTUARIES—THE CRAZE FOR STATUES.

PARIS, July 24, 1885.

As must have been anticipated, the report of Dr. Brouardel's mission to Spain has led to much controversy, to which, however, I can do no more than refer here. The enthusiasm which attended Dr. Ferrán's anti-cholera inoculations at the commencement waned somewhat, but it has again revived, and no wonder, as the population, terror-stricken by the gradual but decided daily increase of the number of cases affected by the disease, and the great mortality therefrom, would resort to anything that would offer even the shadow of a chance of a remedy, whether preventive or curative, for such a dire disease. The consequence is that Dr. Ferrán and his coadjutors are as busy as they can be, for, from the reports which reach us, they inoculate from five hundred to six hundred daily.

The Spanish Government, after having interdicted Dr. Ferrán's inoculations, has again authorized him to continue them. Encouraged by this permission he has expressed his intention of coming to Paris, with the view of submitting his method to the Academy of Sciences, as he is a candidate for the Bréant prize, which is one hundred thousand francs, or twenty thousand dollars, and which was offered some twenty-five or thirty years ago for the best remedy against cholera.

At the meeting of the Academy of Sciences, on Monday last, M. Gosselin, reporter of the commission of the above prize, declared that before expressing any opinion on Dr. Ferrán's communication it will be necessary for the commission to be in possession of official and complete statistics relating to the inoculations already practised by him.

A great deal has been said about Dr. Ferrán's secret, but this physician himself declares that when a thing has been confided to another party it remains no longer a secret. Thus the Paris Academy of Sciences has been in possession of the secret for the last three months without being aware of it. In fact there is no secret at all, and if there is one it consists simply in the attenuation of the cholera virus, which is effected by the action of time, of air, or of heat. To another French mission, from Algiers, which is said to have been received by Dr. Ferrán with great courtesy, the doctor declared that the proper moment at which the cultures present the degree of attenuation necessary for inoculation is when the liquid contains granular corpuscles and commences to lose its alkalinity.

Whatever be the outcome of Dr. Ferrán's anti-cholera inoculations, there is one thing certain—the epidemic in Spain continues its course, and singles out its victims

with unrelenting rigor among the inoculated as well as the uninoculated. The reports that have reached Paris from reliable sources give as the total number of deaths from the disease for the whole peninsula, from the commencement of the epidemic to the 22d inst., twenty-two thousand!

The journal *L'Electricite* announces that apparatus are being prepared to enable the blind to take part in telegraphic work, which, it is remarked, will not be more difficult for them to manage than to play on a piano or an organ. It is also remarked that from the delicacy of their touch and their steady application to the occupation on which they are engaged, they would be quite competent to discharge such duties satisfactorily. It is strange that this idea has not been put in execution before now.

The Municipal Council of Paris has decided upon the establishment of mortuaries in different parts of the town for the use of persons dying in such conditions that it would not be convenient for their families to retain the corpse in their lodgings for the time required by law before interment. The aspect of the building, though simple, is to be elegant and in good taste. Each mortuary is to be composed of a rotunda, which will be freely ventilated by a central chimney. In one portion of the building there will be arranged ten double cells. In each pair one cell is destined for the corpse, while the other is intended for the friends, who will be separated from the former by a glass wall, through which it can be seen. Each double cell is separated from the others.

There seems to be a rage for statues and busts just now in this country. I do not mean to say that the men whom they are intended to represent are not deserving of the honor, but there have been so many erected lately that it can be no longer considered a mark of distinction. In one week alone during the present month there have been unveiled three statues in Paris—one for Voltaire, the great satirical writer and philosopher; another for Béranger, the greatest lyric poet that France has produced; and the third for Pinel, the eminent French physician, who particularly distinguished himself for the important improvements in the treatment of lunatics.

THE "COUNTRY DOCTOR" AND THE INTERNATIONAL MEDICAL CONGRESS.

To the Editor of The Medical Record.

SIR: There is a class of men in these United States known as "country doctors," who have a great interest in the International Medical Congress. They have watched the organization and the re-organization, read the various journal and other comments, but have kept silence. I hope, in speaking as one of them and for them, that I correctly represent them.

Thoreau says of the Concord farmers: "They are greater men than Homer, or Chaucer, or Shakespeare, only they never got time to say so; they never took to the way of writing." This may not be strictly true when applied to city *vs.* country doctors; nevertheless, on account of numbers and talent, they deserve to be heard on this question of organization of the "Congress."

The doctors of the towns, villages, and country places of this land outnumber those of the cities; they are, perhaps, not so scholarly and scientific, they don't have time to write books and journal articles, and do many other legitimate and illegitimate, honorable and dishonorable, things by which to gain notoriety, as do their city friends; but they do as much hard work, more actual study of cases, and in their treatment display as much common sense, and attain as great success in practice. Nor do they concern themselves much about codes of ethics. They have learned that when men are not ethical, codes cannot make them so; and when they are, codes are unnecessary.

This class of men (country doctors) has been missed entirely by both committees. Not even so *small* a compliment has been paid them as a membership of a council. But no complaint has been heard. They are content, and preferably so, to see their friends shine.

In 1884 the American Medical Association selected a committee of talented, wise, honorable, well-known, and competent men. It knew and trusted them, hence gave them unlimited power. They acted. Their report (which can no doubt be somewhat improved) was a most excellent one. We joyfully accepted it and anticipated a grand international meeting. We were glad to see no code, or sectional or other embittering elements introduced to disturb peace and harmony.

Some *city* men, not glad to be unnoticed, as were their country compeers, and having no better right to representation, have disturbed this peace and harmony by getting the American Medical Ass. (a very appropriate name), to set aside its work of 1884; to insult the committee, by not receiving its report; and to insult the members of the Association of 1884, by condemning their action in thus giving so much power to the committee.

This undoing may be legally correct, as Mr. Randall says, but it is not honorable, nor even *ethical*, if we examine the code carefully.

The code has been made to bear the responsibility of this trouble, which is a cowardly ruse. The poor thing never did any harm or any good; it is imbecile, and why abuse it?

I think I state the truth when I say that the "country doctors" of the United States oppose the introduction of the code question *at all* in the "make up" of the congress. What virtue has the code when its adherents conduct themselves so disgracefully as they did last winter in the New York Academy of Medicine? True, the code exists as a printed form, but not as a working fact. It ought to be buried with the transactions and deceased members of the Association.

The country doctors want the congress. They desire to see and hear the men whose works they study. They wish the membership to be on a broad basis, so that they can all attend. They want no code or other embittering thing to be mentioned. They want to be represented by the few who lead the profession and are "known and read of all men," not by the mediocrity (unknown) who are no better than themselves. They therefore ask the return to the original committee and its arrangements; or, that the profession of the United States (not the American Medical Ass.), in whose name the congress was invited, have a meeting, appoint a new committee, and organize the entire programme anew. If neither of these can be accomplished, let the congress be held in another land than ours.

SPENCER M. FREE, A.M., M.D.

DAGUS MINES, PA., August 24, 1885.

HYPODERMIC INJECTIONS OF QUININE IN MALARIAL FEVERS.

To The Editor of The Medical Record.

SIR: The article in THE MEDICAL RECORD of July 25th, entitled "The Success of Hypodermic Injections of Quinine in Malarial Fevers," has led me to send you a brief account of my experience in the treatment of malarial fevers by this method. About a year after my arrival in India I was placed in charge of a general hospital and dispensary situated about seventy miles from Madras, in a town which, with its suburbs, contained a population of over thirty thousand inhabitants. In the year 1876 I was induced, by several articles published in the British and Indian medical journals, to try extensively the treatment of intermittent and remittent fevers by the hypodermic injection of sulphate of quinine. As over nine thousand patients were annually treated in this hospital and dispensary, I was enabled to try this treatment on a large scale.

At first I employed a solution made with ordinary sulphate of quinine and dilute hydrochloric acid, and I was astonished at the wonderful effect produced by these hypodermic injections. Cases that had been taking twenty and thirty grains per diem by the mouth without any apparent effect were cured at once by the injection of from eight to twelve grains. In the first 100 cases subjected to this treatment I had 5 cases of abscess following the injections. Not being satisfied with this result, I determined to try a solution of the quiniæ sulph. solubil. (an English preparation very similar to our bisulphate), prepared with a little tartaric acid. I found this a great success, I might almost say a perfect success. I have used this injection in over two thousand cases without any bad effects, with the exception of one case of small abscess. Even in this case I am inclined to think there would have been no abscess if the patient's arm had been firmly held, and if the operator had not been interrupted by the violent movements of the chill.

During the last three years of my residence in India I was settled on the Neilgherry Hills, where I had a good opportunity of carrying on this mode of treatment by hypodermic injection, and of ascertaining that it was as efficacious with Englishmen as it had proved to be with the natives. Near the tops of these Neilgherry Hills, at an elevation of about six thousand and seven thousand feet above the level of the sea, are situated the two large sanitaria of South India, with an English population of from five thousand to ten thousand, according to the season of the year. The climate on these hills at this elevation being cool and healthy, Europeans are able to live there in comfort and bring up their families. A great number of English gentlemen are residents upon these hills, being engaged in the cultivation of coffee, tea, cinchona, or "planting," as it is termed. To work their large and valuable estates great numbers of native laborers are employed. These plantations are situated on the slopes of the hills, at an average elevation of three thousand five hundred feet, and are therefore below what is called "fever range;" that is, the hilly or mountain tracts of South India are generally infested with malaria until you reach an elevation of over five thousand feet. At certain times of the year it is unsafe to sleep even for a single night on these estates. The native laborers are obliged, however, to live down there, and are therefore constantly prostrated with fever. I have frequently been called to visit one of these estates, and in a single morning would often have to administer hypodermic injections of quinine to over fifty of these native laborers. In addition to constantly and regularly employing hypodermic injections of quinine in the treatment of malarial fevers, I administered quinine in this way quite frequently in puerperal septicæmia, where I found it had a very beneficial effect.

A considerable number of cases of puerperal septicæmia occurred in the lying-in ward of the General Hospital and Dispensary already alluded to. The native doctors and midwives have no real knowledge of anatomy and physiology, and they often employ most violent means to hasten difficult labors. It is therefore not at all surprising that many cases of septicæmia and peritonitis result.

I have already mentioned that the solution generally used was composed of quiniæ sulph. solubil., tartaric acid, and distilled water, the strength of the solution varying from fourteen per cent. to twenty per cent. With adults I usually injected two syringefuls (that is, from five to eight decigrammes) into the upper and outer part of the arm, or on the back of the shoulder, pushing the needle well down into the subcutaneous tissues and even into the muscle. The pain produced was always trifling and of short duration. Sometimes a little redness and very slight swelling occurred, but soon disappeared. I once administered to an English army officer, taken suddenly with a congestive chill, eight syringefuls of a sixteen per cent. solution in twelve hours, with the very best of results, except that he was somewhat deaf for a day or two. Of course, I do not mean to assert that this treatment by hypodermic injection always drove the malarial poison entirely out of the system or effected a permanent cure; but one or two injections nearly always broke up the fever and effected a cure at the time so that a patient would have no return of the fever, unless he exposed himself anew by visiting a locality where malarial fever was rife or allowed his general health to run down. I had two patients—wealthy English gentlemen—who were accustomed to come every few months and get me to give them a hypodermic injection of quinine as a prophylactic measure when they were about to visit a notoriously feverish locality. During the eighteen months that I have been practising here in Chicago, I have made use of hypodermic injections of quinine several times with perfect success. In conclusion, to show what perfect confidence I have in this mode of treatment, I have only to mention that I have had quinine injected into my own arm on two occasions.

H. MARTYN SCUDDER, M.D.
206 TWENTY-EIGHTH STREET, CHICAGO, ILL.

Army and Navy News.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from August 22, 1885, to August 29, 1885.

CRONKHITE, H. M., Captain and Assistant Surgeons Relieved from duty at Fort Reno, Indian Ter., and assigned to duty as Post Surgeon, Fort Hays, Kan. S. O. 129, Department of the Missouri, August 26, 1885.

POWELL, J. L., Captain and Assistant Surgeon. Relieved from temporary duty at Fort Leavenworth, Kan., and assigned to duty as Post Surgeon at Fort Lyon, Col. S. O. 128, Department of the Missouri, August 25, 1885.

KANE, JOHN J., Captain and Assistant Surgeon. Granted leave of absence for one month, to take effect when his services can be spared. S. O. 195, A. G. O., August 26, 1885.

EBERT, R. G., Captain and Assistant Surgeon. Assigned to temporary duty with U. S. Troops at Riverside Park, N. Y. S. O. 179, Department of the East, August 24, 1885.

STEPHENSON, WILLIAM, First Lieutenant and Assistant Surgeon. Granted leave of absence for one month, to take effect September 1, 1885. (Fort Niobrara, Neb.) S. O. 79, Department of the Platte, August 20, 1885.

MCCAW, W. D., First Lieutenant and Assistant Surgeon. Assigned to temporary duty at the camp of the troops near Kiowa, Kan. S. O. 128, Department of the Missouri, August 25, 1885.

Official List of Changes in the Medical Corps of the United States Navy for the week ending August 29, 1885.

JONES, WILLIAM H., Surgeon. Detached from the Wachusett, and waiting orders.

PRECOCIOUS MENSTRUATION.—Dr. Denver reports in the *Gazeta Medica di Bahia* the case of an infant who began to menstruate at the age of two months. The menses appeared regularly every four weeks, and continued for four or five days. On one occasion they ceased for a period of three months, and the child became ill, but recovered her usual good health upon their restoration. She was examined when two and a half years old. She weighed forty pounds, and her face was that of a girl ten or twelve years old. The breasts were the size of small apples, the mons veneris was covered with hair, and the labia minora and majora were well developed.

New Instruments.

AN INTRA-VAGINAL CUP SYRINGE.

By E. P. FRASER, M.D.,

PROFESSOR OF GYNECOLOGY, MEDICAL DEPARTMENT, WILLAMETTE UNIVERSITY, PORTLAND, ORE.

THE proper administration of therapeutic vaginal injections, in the dorsal recumbent position with hips elevated, is almost impossible, owing to the discomfort and annoyance attending the use of the various contrivances for receiving the injection fluid as it leaves the vagina. These are entirely overcome by the simple instrument shown in the accompanying woodcut.

The instrumeut consists of a soft rubber cup, through the bottom of which pass the afferent tube (D), with hard rubber nozzle, and the efferent tube (C), to which is attached a waste pipe two and one-half feet long for conveying the fluid into a receptacle under the bed or table. These tubes are supplied with simple stopcocks (A and B). The nozzle (E) may be removed from the cup when desired.

The cup is readily introduced into the vagina, and when there it exerts pressure on the vaginal walls sufficient to prevent the escape of the fluid except through the efferent tube. The nozzle of any style of syringe may be inserted into the afferent tube, and any quantity of water may be injected with perfect comfort to the patient.

The patient lying on the back, with hips slightly elevated, the fluid will dilate the upper portion of the vagina, aud come in contact with the entire surface, while the more sensitive parts of the vagina, vulva, and perineum are completely protected in case very hot water is used.

When it is desired to make an application of glycerine or other fluid substance to the cervix, the nozzle (E) must be removed, and then, the efferent tube being closed, the fluid is introduced through the afferent tube and allowed to remain as long as required. If preferred, the instrument may be allowed to remain *in situ* after the application has been made, thus serving as a temporary support to the uterus in the place of cotton or oakum tampons.

I have derived much satisfaction from the use of this instrument, and gladly give it to the profession, believing that it needs only to be tried to be appreciated.

These instruments are manufactured by Geo. Tiemann & Co., New York City.

COMPRESSIBLE TUBES FOR APPLYING OINTMENTS TO THE CONJUNCTIVA.

By JOSEPH A. ANDREWS, M.D.,

NEW YORK.

PATIENTS to whom is intrusted the application of an ointment to the eye are not usually careful to cover the vessel containing the former; consequently, in a few days the ointment contains dust or other foreign material, which it is objectionable to apply to the conjunctiva. Also the brush with which the ointment is applied, is rarely kept clean. By means of the simple contrivance pictured above, these objections are quite overcome. These tubes are similar to those in which artists' pigments are put up, and they really are a great convenience; for the tube being made of a thin compressible metal, the ointment is readily squeezed out upon the conjunctiva, and the application becomes as simple as dropping a fluid into the eye; and when the little cap is

screwed on over the mouth of the tube, the latter is secure against the entrance of any foreign material, and may be carried in the pocket. The most convenient size is that which holds about two drachms of ointment. The application is made by directing the patient to look upward, and while you draw down the lower lid with the index finger, the ointment is squeezed out upon the lid. They are manufactured by Mr. Ford, of Messrs. Caswell, Hazard & Co., New York.

40 WEST TWENTY-FOURTH STREET.

Medical Items.

CONTAGIOUS DISEASES—WEEKLY STATEMENT.—Report of cases and deaths from contagious diseases reported to the Sanitary Bureau, Health Department, for the week ending August 29, 1885:

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-spinal Meningitis.	Measles.	Diphtheria.	Small-pox.	Yellow Fever.
Cases.								
Aug. 29, 1885.....	0	37	14	4	5	25	0	0
Deaths.								
Aug. 29, 1885.....	1	8	4	2	6	14	0	0

TREATMENT OF BOILS.—Halle recommends the following application in furuncle. Tannic acid, 1 part; powdered gum acacia, 1 part; tincture of arnica flowers, 2 parts. This is to be painted over the boil and for a little distance around it, several coats being applied until it forms a thick and firm covering. Halle states that this mode of treatment quickly relieves the pain and diminishes the swelling. When taken in time, the boil disappears without the formation of pus; and when this has already occurred, the application causes the extrusion of the core and prompt healing of the furuncle.

REMARKABLE FECUNDITY.—A correspondent of the *Deutsche Medicinal Zeitung* reports the case of a peasant woman, married, at the age of eighteen years, in February, 1873, who has since that time given birth to ten living children, besides having had two miscarriages. At the time of writing, July of the present year, she was in the sixth month of her thirteenth pregnancy.

A FACE WASH.—M. Vigier proposes a lotion of one part boracic acid to one hundred of rose-water, perfumed as desired, as suitable in the treatment or prevention of pimples, acne, or roughness of the skin. It is harmless and can be used for an indefinite period. The face is to be moistened with it morning and night.

THE DISINFECTION OF SLEEPING APARTMENTS.—Professor König, of Göttingen, in an article on this subject in the *Centralblatt für Chirurgie*, says that at one time, while he was practising medicine in Hanau, he suddenly discovered that his bed-room was thickly inhabited by bugs. A friend assured him that he could speedily rid him of the pests, and proceeded to fumigate the apartment with corrosive sublimate. The success of this measure was most gratifying, and when the room was opened the dead bodies of various kinds of insects were seen strewn about the floor. This incident led the writer to hope that the same means would be effectual in destroying the infectious elements of contagious diseases, and a trial in private houses after scarlet fever or measles, and in hospitals after erysipelas or pyæmia, gave most satisfactory results. Since adopting this method, he has never seen a second case of a contagious disease which could be attributed to infection remaining in the room in which the patient had been confined. The mode of procedure is very simple From one and one-half to two ounces of corrosive sublimate are put on a plate over a chafing-dish, and then the windows and doors of the room are closed. At the expiration of three or four hours the windows are opened, and the apartment is thoroughly aired. The person entering the room should take the precaution to hold a sponge or a cloth over the mouth and nose in order not to inhale the vapor. The following day the windows are again closed and some sulphur is burned in order to neutralize any of the mercurial fumes which may still linger about the furniture and other articles. The room is to be again aired and cleaned, and will then be ready for occupancy.

SUICIDES IN LYONS.—There were 99 cases of suicide in Lyons during the year 1883, of which 72 were men, and 27 women. The means employed were, in the order of their frequency: strangulation, 35; drowning, 26; poisoning, 13; fire-arms, 13; asphyxia from charcoal fumes, 6; jumping from a height, 5; cutting implements, 2.

THE TREATMENT OF LUPUS IN PRAGUE.—Dr. Charles C. Ransom, of Richfield Springs, N. Y., writes from Prague, giving an account of the treatment of lupus as practised by Professor Pick of that city. This method is founded upon the theory that lupus is an infectious disease, due to the presence of a bacillus, probably the tubercle bacillus, which finds lodgement in the corium. The absolute proof of this theory is wanting, since, as yet, experiment has failed to show that lupus can be produced by inoculation of the tubercle bacillus in the skin. But the weight of evidence from clinical observation and histological investigation is so strong as to leave little doubt but that lupus is a form of tuberculosis. The indication for treatment, based upon this theory of the etiology, is plainly to destroy the bacillus. Since no agent has yet been discovered which will directly kill the parasite without at the same time producing the death of the tissue in which it resides, it is necessary to work for this end indirectly by the production of cicatricial tissue at the seat of disease, and thus cutting off the blood-supply upon which the bacillus depends for its existence and development. But it is desirable, while occluding the capillaries, to avoid disfigurement in those cases in which the face is the seat of the disease. Professor Pick has found, after a long series of experiments with different chemical caustics, that potassa is the best, as the resulting scar is less richly supplied with blood-vessels than that following the employment of other caustics, such as arsenious acid, corrosive sublimate, nitrate of silver, and the like. This is accordingly used by him in parts where the deformity is not a matter of importance. In lupus of the face, however, in cases in which the disease itself has not already produced irremediable disfigurement, he employs the method of scarification, with the three- or four-bladed lupotome of Veiel, in combination with the galvano-cautery. The patient is subjected to the scarification every other day, a new part being selected at each sitting until that first operated upon is healed. The incisions are carried just through the diseased part into the firm healthy tissue beneath. The amount of surface operated upon each time depends much upon the endurance of the patient. When the part first scarified is healed, the operation is repeated, the cuts being made so as to cross the first ones. The wounds made by the lupotome are dressed with an antiseptic solution. The first part of the treatment is continued until the entire surface involved in the morbid process is converted into cicatricial tissue. In this will now be noticed numerous little lupus nodules, the size of a mustard-seed, which are destroyed with the galvano-cautery needle. But little use is made of anæsthetics as they have been found impracticable; cocaine was extensively tried last winter, but gave little or no satisfaction. Dr. Ransom reports a number of cases in which he was able to verify the favorable results claimed for this mode of treatment. They were some of the more severe cases which he saw at Professor Pick's clinic, and in every one the result was most satisfactory. The ulcerations, when they existed, were healed, and the nodules and points of infiltration were completely eradicated. The resulting cicatrix was smooth and flexible, of a lightish color, and in no way deforming, except, of course, in those cases in which there had been loss of tissue prior to the commencement of treatment. The permanence of the cure is shown by numerous patients, who report from time to time, upon whom the scarifications were practised ten or even fifteen years ago.

THE WAY TO PREPARE SURGICAL SPONGES.—The following is Mr. Lawson Tait's method of preparing the sponges, and but one person is trusted to do this: New sponges are first put into a large quantity of water with sufficient muriatic acid to make the water taste disagreeably acid. They remain in this mixture until all effervescence has ceased and all the chalk is removed. For this purpose it may be necessary to renew the acid several times. The sponges are afterward carefully and thoroughly washed, to make them as clean as possible and free from every rough particle. After being used at an operation, they are first washed free from blood, and then put in a deep jar and covered with soda and water (one pound of soda to twelve sponges). They are left in this about twenty-four hours (or longer if the sponges are very dirty), and then they are washed perfectly free from every trace of soda. This takes several hours' hard work, using hot water, squeezing the sponges in and out of the water and changing the water constantly. Leaving them to soak for a few hours in very hot water greatly assists in the cleansing. When quite clean, they are put in a jar of fresh water containing about one per cent. of carbolic acid, and after being in this for twenty-four hours they are squeezed dry and tied up in a white cotton bag, in which they are left hanging from the kitchen ceiling (being the driest place in the house) till they are wanted. —*American Journal of Obstetrics.*

HOW TO ABORT TYPHOID FEVER.—Dr. Jacob S. Horner, of Lanesville, Ind., sends his testimony to the value of the abortive treatment of typhoid fever, as sketched in THE MEDICAL RECORD of August 4, 1883, by Dr. J. O. Davy, of Springfield, Ohio. He writes that, at the time the article appeared, he had under his care a personal friend suffering from a very grave attack of typhoid fever. The disease was threatening to terminate fatally, despite the doctor's care and skill, but immediately upon beginning with Dr. Davy's remedies an improvement was noticed, and the patient eventually recovered. Dr. Horner adds: "I have used cohothedra compound in my practice since the latter part of August, 1883, and it has in my hands proved itself almost, if not actually, a specific in the treatment of enteric or typhoid fever. It gives speedy relief to all the distressing symptoms, such as high temperature, foul and dry tongue and mouth, delirium, etc. If the treatment is commenced

before the bowels are distended with gas, there will be no tympanites, and but slight tenderness and gurgling in the iliac fossa. Indeed, I can say I have had no case in which my patients were not quite or comparatively comfortable within twenty-four hours. All the febrile symptoms subside and convalescence is fully established in from five to eight days if the plan of treatment, as given in Dr. Davy's letter, is faithfully carried out. I should now feel that I was guilty of criminal neglect to my patients were I to attempt to treat a case of typhoid fever without this new American antipyretic, cohothedra compound." Dr. Horner adds that he has not hitherto kept records of his cases, but intends henceforth to do so, in order to demonstrate in a convincing manner the value of this remedy in typhoid and typho-malarial fevers.

Short Notes of Wounds of the Heart with Survival for an Appreciable Time.—Dr. E. Stirling, of Cleveland, O., sends us the following: "I made a post mortem before Coroner Young, in the case of a man killed by a stab in the heart. After receiving the blow he ran out by the open door on to the street, forty-one feet, before falling dead. The cut was into the left ventricle, of size sufficient to admit the forefinger. In 1856, while in San Francisco, I saw a man who after receiving a pistol-ball through the heart ran seventy-five feet before falling. I visited the spot a few minutes after the occurrence but did not witness the examination. One of the doctors present informed me that the ball passed through the upper and outer portions of the left auricle. All are conversant with the case of Jim Pool, the pugilist, who carried a pistol-ball in his heart for many days. The heart of a deer was shown me, by a doctor in Michigan, that contained well imbedded in the ventricle a rifle-ball, of forty to the pound size. It was positively known that the deer received the wound two years before, and had carried the ball this length of time."

How can we Raise the Standard of Medical Education?—Under this caption a correspondent sends to The Record his views of what is necessary to elevate the average of medical attainments. He writes that he was present at the last meeting of the State Society, when the bill "to regulate the licensing of practitioners of medicine or surgery and to further regulate the practice of medicine or surgery," came up for discussion. And he "listened with feelings of painful regret," because he was "forced to recognize as distressingly prominent in the remarks of some speakers a selfish jealousy amounting to a mere trade instinct." He thinks that it is proper to ask the State to protect the feeble against the ignorant greed of charlatans, but that it is ignoble to beg protection for the profession itself. The solution of the problem is in our own hands, and it is evidently by us alone that the standard can be raised. We should see to it that those are not admitted who embrace the profession of medicine from base motives, just as men of a similar kind are excluded from the ranks of the ministry. "The lack of moral force and intellectual character, which is sometimes complained of in our profession, is the result of our own sins. We at least ought to know the requirements for our profession; other qualities than erudition are necessary to make a physician. The very age at which a young man is supposed to enter a physician's office to read medicine for three years, as is the custom, is the one in which the habits are formed or forming. A little care and observation on the part of the preceptor at this time will enable him to perceive pretty accurately whether the candidate is possessed of all the qualities necessary to make the true physician. If we send to the colleges only gentlemen, in every sense of the word fitted to become physicians, our colleges will necessarily be raised to a much higher standard without seeking State aid. On the other hand, if the proposed law were enacted, the feeling of individual responsibility, which is our only safeguard, would be removed; and we should delegate the keeping of our conscience to the State Board of Examiners, who, from the very nature of their functions, would exclude all considerations of the moral fitness of the applicants." At the same time our correspondent deprecates any steps which would tend to diminish the value of competitive examinations. "Ours is a profession calling into action all the acute perceptions of the human intellect; but not one whit less than learning and science does it require an innate common sense."

A Dutch Account of Hottentot Pathology.—A Dutch practitioner who has lived for twenty years in South Africa sends to an Amsterdam medical journal some particulars of native customs and beliefs. The uterus is supposed to have a great tendency after parturition to fly upward, and consequently after the second stage of labor the funis is carefully tied to one of the woman's great toes, so as to prevent the placenta from slipping away, and as soon as the third stage is completed she is tightly bound with a cloth or a cord at the level of the umbilicus, for if not the restless uterus would ascend into the breast. After the birth of a still-born child nothing can prevent the womb from betaking itself into different regions, and then performing unpleasant and painful gyrations. The writer mentions an old native woman who came to him with a scirrhus of the mamma. She complained of occasional pain in the abdomen, but was not seriously concerned about it, for said she: "I know what that is; it is the womb going round; have I not had a still-born child? From that time there can be no rest for the womb; he (the womb) keeps springing round and round, not always, but at times, perhaps for three months, and then for a fortnight he is still. Sometimes he sits here (indicating the spleen); sometimes here (touching the right breast); sometimes he sits behind my shoulder-bone, and then he burns like a coal of fire." The uterus has to answer in the native mind for most of the ills to which female flesh is heir; has she a colic, sickness, or any abdominal trouble, it is always the old story—"the womb is going round." When listening to a gesticulating patient describing her malady and enunciating her diagnosis of the cause, it is frequently somewhat difficult for a medical man to keep his countenance. It is utterly useless for him to attempt to reason with the woman or explain to her the absurdity of the position she has taken up. She will only doubt his skill, and scornfully reply: "Doctor must not say it is not so, for I know that it is." Among the natives the new-born babe is treated to a purifying draught of the father's freshly-passed urine. The whites, some of whom are nearly as ignorant and superstitious as the natives, employ a quack "wonder-essence" as a substitute.—*London Lancet.*

Fatal Paraplegia Due to Sarcoma of Vertebræ.—Dr. G. W. H. Kemper, of Muncie, Ind., reports the following interesting and rather unique case: Mrs. B——, aged forty-four, married, with three children, came under his observation in August, 1884. Six years previously a carcinoma had been removed from the left mamma, leaving half the gland. About five years later (May, 1883) this remnant had become painful and indurated and was also removed. Soon after a third tumor appeared in the cicatrix, followed by enlargement of axillary glands. A perceptible prominence was observable over the eighth and ninth dorsal vertebræ. At this time she came under Dr. K——'s observation. She had a very slight temperature; pulse, 85. Functions of bladder, rectum, and uterus normal, with occasional pains in extremities. She was lying upon her back with her lower extremities extended. She had the power, rather feebly, however, to flex and extend the lower extremities, and could very well control the movements of the upper extremities. She already had lain in this position for six weeks when we saw her, and had been treated by a homœopathic physician for rheumatism. She was utterly unable to raise her head or turn in bed; in fact, it was at the cost of very great pain that she

could be even carefully turned or lifted temporarily from her supine position. The spine showed upon pressure considerable tenderness over the greater portion of its extent, and was so inflexible that the least curving in any direction gave rise to distressing pains, especially cervico-brachial. A peculiar symptom that she dwelt upon at this and other times in the course of the disease, was "a feeling as if the contents of the abdomen would fall out through the abdominal walls." This sensation was disagreeable rather than painful, and had annoyed her for some weeks. The history of the case, together with the result of examination, suggested a diagnosis of spinal irritation, complicated possibly with congestion and due to malarial origin, as she gave a malarial history. A general tonic course with quinine for the malaria benefited her but little. The spinal symptoms gradually became more pronounced, and finally paraplegia, accompanied by neuralgic pains, invaded successively the right arm, hip, thigh, and leg. Increasing numbness, especially in the lower extremities, led to the conclusion that the previous diagnosis was incorrect and that the trouble was really due to spinal compression, resulting from a malignant vertebral growth, secondary to the previous mammary neoplasms. In December the patient died, having suffered for some weeks previously from dyspnœa, loss of normal action of rectum and bladder, "girdle" pains and various abnormal sensations. One small bed-sore formed. Toward the end the pulse grew more rapid and intermitted occasionally. An examination of the vertebræ above mentioned revealed a neoplasm consisting of round and spindle cells of a typhoid type, so arranged that the spindle cells were so placed as to form trabeculæ with intervening alveolar spaces. Within the latter were the round cells. In other words, the growth was an *alveolar sarcoma.*

Useful Agents in the Treatment of Scarlet Fever.—When lecturing upon scarlet fever Professor Da Costa mentioned the following agents as being of use: 1. Carbolic acid, gtt. ½, a dose for child two years of age; give in mint water. 2. Ammonium carbonate, gr. ij., every two hours, to child ten years of age. 3. Potassium chlorate, 3 j., in water, O j.; patient to drink this in twenty-four hours. 4. Salicylic acid when high temperature is present. 5. Small doses of chloral. Always keep skin active, and if heart be weak, give digitalis—if arterial tension be high, give aconite. When much exudation has occurred, he prescribed, for its solvent action: ℞. Ammonii carb., gr. x.; Liquor. ammon. acetat., f ℥ ss. M. Sig. Every four hours. If there is much depression, prescribe also quinia and digitalis in combination.—*Col. and Clin. Record.*

Buckwheat Flour in the Treatment of Diabetes.—Dr. Y. H. Bond, of St. Louis, Mo., writes: "Some time since I read an article in your journal upon the subject of 'Diabetes Mellitus,' in which buckwheat flour was said to have been used, as the exclusive bread diet, with the result of a disappearance of the sugar from the urine. In support of that observation, I herewith report my experience in the trial of the same agent on the only patient that I have treated for that trouble since reading the article referred to. On May 11, 1885, I was consulted by Mr. W——, aged sixty-three, of Scotch descent, possessed of fine physical development and a stable nervous system, resident of the State of Vermont. His only ailment consisted in the passage of an excessive amount of water, which he stated had troubled him for more than a year past, and that the amount of water passed was about the same every day. He passed from 9 P.M., May 13th, to 9 P.M., May 14th (twenty-four hours), three quarts of water. On examination sugar was found in abundance. I continued to examine his urine at varying intervals up to June 15th, discovering little or no variation in its quantity or character up to that time, pursuing this course with the view of determining the constancy of the sugar, amount, etc., uninfluenced by treatment, in order that I might know what, if any, effect was produced by my management of his case. On June 15th I instructed him to discontinue the use of Irish potatoes; and, in place of bread made from wheat flour, or corn meal, to use buckwheat flour, prepared as his taste might prompt. I am satisfied that my instructions have been faithfully complied with. The quantity of urine passed grew less in a very short time, the amount passed from 5 P.M., July 7th, to 8 A.M., July 8th, being one pint only—and on examination was found to contain no sugar. I examined his urine again on the 11th ultimo, with the same result—no sugar and the same reduced quantity."

A Substitute for Carbolic Acid.—The extraordinary power of naphthol as an antiseptic and disinfectant has been known for a long time, but its disagreeable smell, and the difficulty of preparing it in a pure state, with the occasional toxic action of the crude naphthol, have hitherto prevented its general adoption as a remedial and antiseptic agent. Justus Wolff, a chemist interested in coal-tar products, has recently succeeded in producing it in a pure and odorless state in well-defined crystals, and he claims its antiseptic action is much greater than that of carbolic acid. Recent research has demonstrated that the toxic effects of crude naphthol were due to the impurities it contained. Dr. Shoemaker, of Philadelphia, in a paper read before the Philadelphia. County Medical Society, on the "Medical Use and Value of Naphthol," conclusively proved the non-poisonous character of the purified or odorless naphthol by taking large doses internally. It has no corrosive action on the skin, and will not injure textile fabrics. As a remedial agent it is said to act with greater efficiency than carbolic acid, and if so, the fact of its being absolutely odorless will make it a desirable substitute for the latter. It is expected that it will shortly be manufactured in large quantities and introduced as a substitute for carbolic acid.

More about the International Congress.—"It [the new committee] has, however, performed, in our judgment, the most stupendous work of supererogation ever exacted from a body of intelligent men. We are totally unable to see how the fortunes of the Congress have been a tithe benefited by the changes made. On the contrary, it has suffered immensely in the eyes of all unbiassed thinkers by this unnecessary controversy about representation on Sections and 'New Code' principles. As the Congress now stands organized, we much doubt its ability to attract that attention as a scientific body it was entitled to. How can those men interested in pure science feel that same interest in the fortunes of an organization handicapped with contentions for offices and ethics, and weighed down with that ponderous body, the American Medical Association?"—*Maryland Medical Journal.*

"The committee did the work expected of it, and with less malice than would have seemed possible, but with sufficient thoroughness, we fear, to put an end to the prospects of a successful and creditable *international* congress, and adjourned to meet in St. Louis on the first Monday in May, 1886. . . . These gentlemen proposed to aid and participate in the discussion of questions of medical science, not of medical ethics, medical politics, or of square miles of territory. There will, however, be more offices, although less congress, for those who prefer such discussions and such distinctions to a harmonious gathering of scientific men searching for truth; and we hope somebody may be happy, if it be only for a short time.—*Boston Medical and Surgical Journal.*

Trichloracetic Acid.—This substance is said to be an excellent antiseptic agent. Dr. Filipovich has employed it with success, in an aqueous solution of the strength of 2½ to 5 per cent. in the treatment of wounds, erysipelas, soft chancre, etc. He has also given it internally in gastric catarrh and cancer, in doses of 2 to 4½ grains (0.12 to 0.30 gramme) for adults.

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THE MODERN METHODS OF TREATMENT OF GUNSHOT WOUNDS.

A CONSIDERATION OF THE PRINCIPLES OF NON-ANTISEPTIC OCCLUSION; PRIMARY ANTISEPTIC OCCLUSION; PRIMARY, INTERMEDIARY, AND SECONDARY DRAINAGE; RESECTIONS, ETC.; EARLY VERSUS LATE ANTISEPSIS IN MILITARY SURGERY, AND THE PRACTICABILITY OF ANTISEPTIC METHODS IN WAR SURGICAL PRACTICE.

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THERE seems to be an impression almost universally prevalent among the laity, and widely so among the medical profession, that a gunshot wound calls loudly for some one or all to do something.

To combat this indiscriminate tendency on the part of surgeons to be "overmeasurely busy" (übermässig geschäftig) in the treatment of gunshot wounds, is in some measure the purpose of this article. To this end it is desired to set forth the claims of the several methods of treatment; to endeavor to assign to each its relative precedence; to compare the relative value of early and late antisepsis, inquiring as to whether the application of the former is optional or obligatory for securing the further favorable course of the reparative wound processes; to consider the practicability of the antiseptic methods in war surgical practice where the surgeon has to deal with a multiplicity of wounded under the conditions of bad hygiene and haste, incident to the exigencies of field service; and finally, to consider the claims of the several primary methods of treatment as adapted to injuries of different parts and regions of the body, and the wide range of applicability of the method by primary antiseptic occlusion. The recent marked advancement in this branch of surgery is largely owing to the lessons drawn from the practical experiences of military surgeons in our late wars and campaigns.

Scarcely till the time of the Franco-German war had it begun to be recognized as an established principle of practice that a gunshot wound might heal without drainage and without apprehension of pus secretion. In the riots that occurred in the streets of the French metropolis subsequent to the war of 1870–71, a number of cases was observed by surgeons, after healing was complete, in which the repair of the wound-track had taken place under a blood-scab or crust, by the *laisser faire* treatment which befell them, owing to the guilty fears of the wounded rioters to present themselves before the Parisian surgeons.

In the War of the Rebellion, but two decades gone by, antiseptic occlusion was not practised at all, and primary occlusion without antiseptic precautions, when practised, was not, in the main, founded on well-understood or determined principles of war surgical practice as later developed in the comparatively recent European wars.

Before going on, it behooves us to start out with technical phrases clearly defined, and methods of treatment simply classified, so as to avoid all ambiguity of words or meaning.

These methods may be severally classified and defined as follows:

1. *Non-antiseptic occlusion—i.e.*, the healing of a wound under the simple blood-clot, scab, or crust, without the intervention of surgical aid or appliances—hence, without instrumentation and without antisepsis or drainage. It is Nature's best effort, unaided. It is a better effort in many cases than a misguided surgical interference.

2. *Primary antiseptic occlusion*, or the immediate application of an occlusive covering to the wound on antiseptic principles. The *immediate* application implies at the earliest possible moment after the injury, for although several hours, or even a day or two might intervene without injury between the time of reception of the wound and its occlusion, yet inasmuch as this time or interval is only a relative one and cannot be determined *a priori* in any given case, the occlusion should take place at once, to preclude the possibility of infection from without.

In testing the merits of antiseptic occlusion, it seems not to be enough to declare that wounds were closed on the same day or the next day at farthest, for some wounds become unsuitable for occlusion even a few hours after their infliction; hence in so far do reports of unsuccessful cases lose assurance where an interval of time is permitted to elapse before occlusion is practised. This is not denying that a wound may heal by occlusion, even if the dressing is applied for the first time hours or days after the injury, but such cases present no tokens by which they may be recognized *a priori* by the surgeon; hence the emphasis upon the immediateness of the occlusion, and hence also the importance of considering how this necessity is to be met in war—*i.e.*, how the primary antiseptic occlusion and the other primary methods can be made practicable upon the battle-field.

In considering this point farther on, the writer shall, of course, owing to his inexperience in actual warfare, although it has fallen to his lot to test in a measure the principles whereof he speaks—isolated cases in hospital and military practice—disclaim any spirit of dictation, but shall give what he has learned from a study of the subject as handled especially by the German military surgeons who figured prominently in recent European campaigns. In this second method, not only should the occlusion be immediate with regard to the lapse of time, but also in respect to affording neither time nor place for practices of probing, digital examination, extraction or attempt at extraction of bullet, disinfection, or drainage. There exist only these indications: to cleanse antiseptically the superficies in the immediate vicinity of the wound, and at once apply an occlusive covering of antiseptic material. To make any given case authentic, as having been treated under the second method, it may not be immaterial, at any rate not undesirable, to state in the report of the case the negative assertion that no internal examination of the wound was made, either with the sound or with the finger.

The best-informed surgeons found it difficult to impress the paramount necessity of this simple precaution upon their associates in the war, so that these latter should sufficiently realize its imperativeness, and hence arose the limited opportunities of getting hold of the cases sufficiently early, *i.e.*, before a surgeon or assistant, or meddlesome "sanitar" had internally examined the wound-track with the finger, or its extension the probe; thus laying open a hitherto practically subcutaneous injury, infecting a hitherto non-infected wound, and thereby precluding its occlusion.

In such an instance, the golden hour for its occlusion

having passed, the virtually subcutaneous and surgically clean wound of an hour ago, so well adapted for healing *per scab*, with its comparative immunity from the destructive processes to which open wounds lay themselves liable, must be treated as an open, gaping, and if not a visibly contaminated, at least a surgically unclean wound—such a one as must needs be disinfected and drained, *i.e.*, treated according to the third method of treatment of gunshot wounds, namely, primary antiseptic disinfection and drainage.

Although primary drainage is not the worst accident that can befall a gunshot wound, and although probably it takes precedence of all secondary methods (which point will be further on considered), yet let it be remembered that experienced military surgeons abroad (Esmarch, Langenbeck, Reyher) and at home give their firm advocacy to the primary occlusion in all cases to which it is applicable, as the best method, and consider that the cases to which it could be rationally applied would largely increase if surgeons would hold inviolate the negative precepts (unless the indication to the contrary were clear) of no probing, no digital examination, no extraction of or "search after" the bullet, etc.

Sir Wm. McCormac, in his visit to this country a short time ago, took occasion in a lecture delivered, by invitation from the Professor of Surgery, before the students of Bellevue Hospital Medical College, to caution them against the indiscriminate use of the probe or finger in gunshot wounds, affirming the soundness of the modern views and precepts upon the treatment of gunshot wounds, given by such eminent military surgeons as Esmarch and Reyher, "not to do any damage," and to treat in all respects sparingly, etc.

To excessively and painfully diagnosticate a gunshot wound, for instance, of the knee-joint, is as harmful and unwarranted a procedure as percussion of a chest of one sinking with pneumonia for the purpose of locating more definitely a patch of hepatized lung. It is fairer that our vanity should forego the exhibit of our diagnostic acumen than compromise, yea, jeopardize, the chances of our patient's recovery. It is better that our patient recover his joint without anchylosis, though he may be ignorant of its involvement, than that he should go maimed through life, through his surgeon's excessive diagnostic inquisitiveness.

3A. *Primary antiseptic drainage, i.e.*, the scrupulous disinfection of a wound visibly contaminated or specifically or septically infected, from any cause whatsoever (surgeon's probe or finger, particles of dust or foul air, pieces of clothing or other foreign bodies, exclusive of the bullet, which is usually innocuous, and if it cause disturbance can be removed later, when the dangers of septic phlegmon, erysipelas, pyæmia, etc., are past), and the removal of all irritating secretions the very moment they are formed through some provision for drainage, to make which complete it may be necessary to resort to extensive incision—cuts and partial resections, etc.

The primary drainage is intended to prevent the accession of inflammation, to dispel all apprehension of pus formation, which process can serve no useful purpose, but drains off, in its ichorous secretion, the highly vitalized organic tissue elements intended for the constructive processes of wound repair. Esmarch formulates his practice in infected wounds thus: "An early antisepsis, a radical disinfection, and an infrequent repetition of the cleansing and dressings."

Referring[1] to Esmarch's permanent aseptic dressing the *Medical and Surgical Reporter* states that "Esmarch has carried asepticism to its logical conclusion, maintaining that if a wound is once well and completely dressed antiseptically, it should heal without much further attention, and that changing the dressings is merely incurring new dangers needlessly." And Lister, speaking of this "Dauer Verband," characterizes the accumulation beneath it of bloody serum and foul secretions of a week's standing as "surgically clean because it is aseptic," and the "æsthetically cleanly water" he declares to be "surgically dirty because it contains elements that give rise to septic changes in wounds."

The drainage, then, in the third method, should coincide with the formation of the first wound secretions, which are at that time, to be sure, not septic or virulent, but physiological in their vital properties and composition, but very prone to take on putrefactive decomposition, and if no provision is made for their seasonable conduction from the wound, decompose and set up irritation and consequent inflammation.

In this sense is the drainage primary, and, when done with antiseptic precautions, constitutes the third method, which, however admirable it may be in its operation and results, is not comparable with the simplicity of application and the beautiful results obtainable by the preceding method.

3B. *Primary resections and amputations;* surgical interferences which take place immediately that the injury is done, and have for their object the securing of better drainage or the conservation of a limb or other body member and the preservation of its proper function, or the saving of life at the cost of a limb from the amputation—cut which partakes of the character of a large incision—cut in that it affords ample drainage for the secretions.

4. *Intermediary drainage, resections, and amputations;* operative measures introduced after the acute stage has passed and before the approach of the suppurative stage. These operations are usually done upon infiltrated parts, and, like secondary methods, should be followed by the open treatment of the wound or stump, so as to make ample provision for the profuse discharges from the infected and infiltrated tissues.

5. *Secondary drainage, resections, and amputations;* surgical procedures introduced after the setting in of suppurative action.

The latter partake of the character of a forlorn hope, and awaken in one's mind the consciousness of a lost or unheeded opportunity. The relative merits of the primary and secondary drainage still remain to be considered in subsequent paragraphs.

To recapitulate, now, the several methods of treatment of gunshot wounds: 1, Non-antiseptic occlusion; 2, primary antiseptic occlusion; 3, primary antiseptic drainage, resections, and amputations; 4, intermediary antiseptic drainage, resections, and amputations; 5, secondary antiseptic drainage, resections, and amputations. We may now go on to consider the subject of early *versus* late antisepsis in military practice.

Given, a gunshot wound that is certainly infected and hence cannot be occluded, but must be disinfected and drained, the query arises, Does experience teach that an early antisepsis is obligatory or optional? If optional, *i.e.*, if secondary antisepsis will afford us as good results as primary, then the problem, how to make primary methods practicable upon the battle-field need not present itself to our minds for solution. It were then already solved by its abnegation as not being necessary, and hence to be dispensed with, and late methods of antisepsis substituted therefor.

Upon this point, strangely enough, the experience of the Prussian military surgeon, Oberstabsarzt Hahn, in the Roumanian war, is at variance with those of Reyher and Bergmann.

Hahn declares that he experienced a complete antisepsis in cases admitting of a radical disinfection and subsequent complete drainage, even in patients wounded at Plevna and Ratowa, who had to pass through a three to five days' transportation. He further declares that under his care he did not perceive a single case of septicæmia, pyæmia, gangrene, or erysipelas.[1]

[1] Braithwaite's Retrospect.

[1] Fischer: Kriegschirurgie.

Von Scheven distinctly states that the efficacy of an antisepsis depends less upon the interval of time elapsing between the receipt of the injury and the disinfection than upon the configuration of the wound, *i.e.*, whether or not the wound will permit of a thorough disinfection and subsequent effective drainage. His experience seems corroborated by the testimony of other Prussian surgeons, who claim to have observed an antisepsis in cases not coming under a radical antiseptic disinfection until after the first week subsequent to receipt of injury. According to Reyher's experience, an early antisepsis seemed imperative, and the problem for military surgery seemed to be, how could a primary (early) antiseptic *régime* be made practicable upon the battle-field, "seeing that an engagement does not usually terminate before nightfall, that the wounded must be gathered in and await their turn, and in order that the antiseptic disinfection be made radical and effective, it must be done with system and care." [1]

Naturally enough, the success of Hahn and Von Scheven with a late antisepsis raised high hopes in the expectations of military surgeons, and would, indeed, have inaugurated a happy era in war surgical practice, had not their experiences been set over against those of two such eminent surgeons as Reyher and Bergmann. The statistics of these latter two show a large per cent. of recoveries in early over late antiseptically treated shot-wounds of all kinds, and emphasize the importance and necessity of an early antisepsis. On the other hand, Hahn asserts that an early antisepsis is not imperative; but a late disinfection, if it be done with scrupulous care, so that it shall be radical, will prove equally efficacious.

This is a startling assertion in the face of facts and figures given us by Reyher in his Turko-Russian campaign; and Fischer does not attempt to reconcile or explain such glaring differences from equally reliable sources.

I cannot withhold Reyher's tables, which speak with no uncertain sounds as to the marked precedence of primary over secondary methods of wound-treatment, both in joint-shot injuries and shot fractures. I, therefore, insert his tables Nos. xi., xii., xiv., and xv.[2]

TABLE XI.—*Seventy-eight Joint-shot Injuries Treated by Secondary Antisepsis.—Conservative-expectant Therapy.*

	Healing under the scab carried out.			Drainage after an unsuccessful attempt at healing under the scab. This secondary drainage was carried out.			Intermediary and secondary resection after unsuccessful secondary drainage.			Intermediary and secondary amputation after unsuccessful secondary drainage.			Intermediary and secondary amputation after unsuccessful resection.			Total of all joint-shot injuries treated by secondary antisepsis.		
	Number of cases.	Number of those that died.	Mortality per cent.	Number of cases.	Number of those that died.	Mortality per cent.	Number of cases.	Number of those that died.	Mortality per cent.	Number of cases	Number of those that died.	Mortality per cent.	Number of cases.	Number of those that died.	Mortality per cent.	Number of cases.	Number of those that died.	Mortality per cent.
Shoulder-joint	..	..	..	1	..	..	6	3	50.0	..	..	....	..	..	....	7	3	42.8
Elbow-joint	2	..	..	1	..	..	6	2	33.3	..	..	....	2	1	50.0	11	3	27.2
Wrist-joint	..	..	..	..	..	..	4	..	....	..	..	....	1	1	100.0	5	1	20.0
Hip-joint	1	1	100	1	1	100.0	2	2	100.0	..	..	....	..	..	....	4	4	100.0
Knee-joint	..	..	..	19	18	94.7	..	..	....	21	16	76.1	..	..	....	40	34	85.0
Ankle-joint	..	..	..	1	..	..	4	1	25.0	1	1	100.0	..	..	....	6	2	33.3
Tarsal-joint	..	..	..	2	..	..	2	1	50.0	..	..	....	1	..	.. .	5	1	20.0
	3	1	33.3	25	19	76.0	24	9	37.5	22	17	77 2	4	2	50.0	78	48	61.5

TABLE XII.—*Eighty-one Knee-joint Injuries Treated Conservatively.*

	Conservative treatment not interrupted.						Conservative-operative.		Conservative treatment interrupted.				Whole number of cases treated.			The extremity was retained.			
	Treatment by seclusion to the end.		Primary drainage uninterrupted.		Secondary drainage to the end.		Secondary resection.		Through intermediary amputation.		Through secondary amputation.					How many times.	In what per cent. of the cases not running a lethal course.	With mobility in the joint.	Without mobility in the joint.
	Number of cases.	Deaths.	Number of cases.	Deaths.	Number of cases.	Deaths.	Number of cases.	Deaths.	Number of cases.	Deaths.	Number of cases.	Deaths.	Number of cases.	Deaths.	Mortality per cent.				
Primary antiseptic treatment	10	..	6	3	2	..	..	..	..	..	..	..	18	3	16.6	15	100.0	15	..
Secondary antiseptic treatment	..	..	..	..	19	18	..	..	9	7	12	9	40	34	85.0	1	16.6	..	1
Non-antiseptic treatment	2	..	..	..	7	6	1	1	..	..	13	11	23*	18	78.2	2	40.0	1	1

* Only one life was saved of these 23 cases. This case healed definitively under the scab. The mortality per cent. is, therefore, not 78.2, but 95.6 per cent.

FRACTURES.

TABLE XIV.—*Twenty-two Fractures Treated by Primary Antisepsis.*

	Antiseptic occlusion.			Primary antiseptic drainage.			Conservative treatment interrupted through intermediary amputation.			Conservative treatment interrupted through secondary amputation.			Total of all fractures treated by primary antisepsis.		
	Number of cases.	Deaths.	Mortality per cent.	Number of cases.	Deaths.	Mortality per cent.	Number of cases.	Deaths.	Mortality per cent.	Number of cases.	Deaths.	Mortality per cent.	Number of cases.	Deaths.	Mortality per cent.
Arm	2	..	....	2	..	....	..	..	....	..	..	....	4	..	....
Forearm	1	..	....	2	1†	50.0	..	..	....	..	..	....	3	1	33.3
Metacarpal bones	..	..	....	..	..	....	..	..	....	..	..	....	..	..	....
Thigh	1‡	1	100.0	2	2§	100.0	..	..	....	1	1	100.0	3	3	100.0
Leg	4‖	..	....	8	..	....	..	..	....	..	..	....	12	..	....
Tarsal and metatarsal bones	..	..	....	.	..	....	..	..	....	..	..	....	..	..	....
	8	1	12.5	14	3	21.4	..	..	....	1	1	100.0	22	4	18.1

† Shell injury. ‡ Interrupted through secondary drainage. § Interrupted through secondary amputation, hence also counted in this column.
‖ Once interrupted through secondary drainage.

[1] Fischer: Kriegschirurgie.

[2] Sammlung Klinischer Vortraege, No. 142–143.

TABLE XV.—*Sixty-five Fractures Treated by Secondary Antisepsis.*

	Treatment under the scab carried out to the end.			Secondary drainage carried out to the end.			Secondary drainage interrupted through intermediary amputation.			Secondary drainage interrupted through secondary amputation.			Total of all cases treated by secondary antisepsis.		
	Number of cases.	Deaths.	Mortality per cent.	Number of cases.	Deaths.	Mortality per cent.	Number of cases.	Deaths.	Mortality per cent.	Number of cases.	Deaths.	Mortality per cent.	Number of cases.	Deaths.	Mortality per cent.
Arm	2	..	....	7	4*	57.1	3	1	33.3	..	..	....	12	5	41.6
Forearm	..	..	....	3	..	....	..	..	....	..	..	....	3	..	....
Metacarpal bones	..	..	....	1	..	....	..	..	....	..	..	....	1	..	....
Thigh	4	..	....	16	8	50.0	5	5	100.0	..	..	....	25	13	50.2
Leg	..	..	....	19	3	15.7	2	2	100.0	1	..	....	22	5	22.7
Tarsal and metatarsal bones	..	..	....	2	..	....	..	..	....	..	..	....	2	..	....
	6	..	....	48	15	31.2	10	8	80.0	1	..	....	65	23	35.3

* In these, two were complicated through other injuries (shot injury of lungs and spinal marrow).

Probably the weight of authority declares in favor of an early antisepsis. At any rate, it was instructive to observe how small a per cent., in Reyher's experience, of those who died under primary antisepsis, as compared with those who died under secondary antisepsis, succumbed to pyæmia and septic phlegmon.

In favor of an early antisepsis, I may find an argument in some facts communicated to me in a letter by Dr. Adler, who furnished me with an extract from a communication by Professor G. C. Bon, entitled, "Properties of Antiseptic Remedies and the Value of the Products of Decomposition."

The salient points *apropos* to our present argument were: 1. That no parallelism was observed between the power to prevent the commencement of a decomposition and that of arresting the same after it had once begun. Alcohol and carbolic acid, which are so efficient conservatives, possess but a small influence over a decomposition once commenced; and as carbolic acid has such an extraordinary success in surgical practice, this effect must be ascribed solely to its power of preventing decomposition. Professor Bon concludes from his experiments that carbolic acid is a powerful preventive to decomposition, but a weak germicide. Indeed, he regards carbolic acid as a substance very much adapted for a long preservation of bacteria (! ! !).

He has in his possession solutions of carbolic acid, four months old, which contains an abundance of bacteria. He found that if 10 ctm. of a normal solution—a watery solution containing one-tenth of its weight of chopped meat was accepted as a normal liquid—be mixed with fifty or a hundred centimetres of a saturated solution of carbolic acid, it would result as follows: Most of the bacteria would lose their movability, while the smaller ones would remain alive and would be fruitful.

2. No parallelism exists between the disinfecting power of an antiseptic and its action upon bacteria.

Professor Bon found permanganate of potassium—one of the most excellent disinfectants—to have no effect upon micro-organisms, while alcohol, which retards the development of microbes for a considerable length of time, acts disinfectantly only in a very slight degree upon putrescent substances.

3. The power of an antiseptic becomes weaker the further décomposition has advanced. For example, should a watery solution containing one-tenth of its weight of chopped meat be accepted as a normal solution, a putrid odor will develop in the first days of the decomposition, which smell can then be removed by small quantities of an antiseptic; if, however, the putrid odor is permitted to develop further, a proportionally large quantity of an antiseptic is required to dispel it.

Now, if the virtue of carbolic acid, as the representative of a class, lies in its power to prevent decomposition, it would seem reasonable to infer that to insure its full benefit it should be applied early—primary disinfection, *i.e.*, before the putrid stage has set in, the stage of bacterial development.

Do not, then, these experimental data of Bon in the laboratory tend to confirm the practical results of Reyher on the battle-field, and incline one to favor the application of antiseptic treatment at the earliest practicable moment.

The scientific labors of Dr. George M. Sternberg, surgeon U. S. Army, in this direction, and their practical teachings, are sufficiently well known to American readers to need no reference here.

Assuming, then, what is altogether probable, that better results are brought about in war surgical practice, through an early, *i.e.*, primary antiseptic *régime* than through a late antiseptic treatment, the question of the practicability of primary methods in military practice may well come up for consideration.

In order that these methods shall, in actual warfare, be strictly primary, it is essential that provision be made so that these methods can be applied upon the battle-field.

Recognition must there and then be taken of the principles of antisepsis, and nothing should be done contrary to those principles, either through the ignorance or meddlesomeness of assistants or negligence or want of information on the part of the surgeons. The former should be instructed, so far at least, in the underlying principles of antisepsis, that they shall do no damage, for example, by roughly handling a compound penetrating fracture in transportation, so that the wound be made to gape, and by a suction force draw air within, and by pumping movements cause it to infiltrate the interstitial tissues; or by rough manipulations set up a profuse primary hemorrhage in such a fracture, making it necessary for the surgeon to go into the depth of the wound and ligate, and hence causing the wound to become unfit for occlusion, to which it was till then in every way suitable.

Or again, the assistant may act contrary to the principle of antisepsis by examining the wound internally with probe or finger, before the most experienced and best-informed surgeons shall decide that the wound was previously infected, and was from the moment of receipt of injury an unclean wound, as, for instance, in large shell-wounds which from the very nature of the injury are open and infected from the start.

Although (thanks to the rifles and projectiles of modern warfare) a large number of wounds can be readily disposed of without much loss of time under the treatment by primary antiseptic occlusion, which is so simple in its application that unskilful hands may apply it, if only guided by the principles of antisepsis, yet there remain over a considerable number of wounds which demand at the hands of the surgeons immediate antiseptic cleansing, disinfection, and drainage, and not a few that require primary resections and primary amputations.

How shall all this be done with system and care upon the battle-field? How was it brought about, as Reyher asserts, that he "was enabled to carry out in his flying hospital a treatment fundamentally different from that possible in the Russian military hospitals?" He tells us that under the protection of the Caucasian Committee of the Society of the Red Cross, a field hospital of one hundred and fifty beds, and a flying hospital of forty beds were placed under his direction. These hospitals were supplied with all apparatuses and materials necessary for the complete carrying out of the essential principles of

Listerism, and attached to each was a surgical staff thoroughly informed in, and in accord with, the principles of antisepsis, and also a corps of nurses (Sisters) trained at the Dorpat clinic, and hence intimate with the antiseptic methods of wound-dressing.

Translating from his pamphlet: "The flying hospital, with the headquarters, attended the movements of the operations directed against Kars; the field hospital followed the same at a distance of 20 to 40 kilometres (1¼ to 2½ miles). Thus it was in the position, in connection with the division hospitals, to possess every time, at the main dressing-place, my own operation-tent, and to be able to carry out in it everything after Listerian principles. As the flying hospital further possessed its own transport train of two-wheeled and large ambulances, it was further possible for me to direct the cases taken up on the dressing-ground, and cared for after Lister, with my own ambulances and my own *personnel* into the flying hospital, and thence, after a few days' rest, into the field hospital. In this way were assured to me the first dressing, and a continuation of observation and treatment."

Such paramount importance does Reyher attach to this "continuity of observation and of treatment," that he considers it advisable that the same medical *personnel* should be active in the field hospitals as attended the wounded upon the first dressing-place. To this end he would have the rear-hospitals follow constantly in turn the movements of the army, in lieu of transporting the wounded through a series of hospitals to the rear-hospitals, making discontinuous the observation and treatment.

How far this may be practicable, he leaves to the administrative to determine.

Again quoting from his pamphlet: "Thus only will be assured to the observation the continuity so extremely important to the welfare of the treatment, and thus only will be afforded to the surgeon the possibility of perfecting himself in the surgery of war. Of the transient impressions on the battle-field and at the principal dressing-place, there remains to the surgeon only the picture of the severity of the injuries and their multiplicity; he sees and learns there nothing of the most important thing, the course of the wound and the process of healing."

In another paragraph, speaking of the greater length of time required for the antiseptic care of wounds over non-antiseptic therapy, and admitting that an hour's time or more may be taken up in the radical disinfection of a single knee-joint, he concludes in these words: "But if one considers that the majority of shot-fractures from small arms, and shot-wounds of the soft parts will require only an antiseptic occlusive dressing, which any voluntary assistant can apply; that the application of the tin-splints (Volkmann's), cut and on hand, can be done by any surgical assistant; that ligation of arteries is very seldom indicated upon the dressing-place, and then even is an operation consuming the least time, thus then only the primary amputations indicated through tearing apart by large shot, and the joint-shot injuries and fractures which call for a primary disinfection or resection, remain over for the activity of the operating surgeons. The number of these, to be sure, can be very large if each of the injuries has already been probed or examined with the finger before it comes under treatment at the principal dressing-place. But it will certainly not be large if from the battle-field up to the principal dressing-place the surgical activity shall confine itself to provisionary measures, and as wide a play as possible be given the occlusive method upon the dressing place.

We come now, naturally enough, to consider the merits of the several methods and their adaptation to uncomplicated gunshot wounds of the soft parts, and to such wounds, complicated with fracture, simple and compound, or complicated with injury to the blood-vessels, or by lodgement of foreign materials visible to the eye, causing palpable infection, or by microbes macroscopically invisible, but, nevertheless, surely infectious, etc., and, further, to gun-shot wounds of the joints and the large body cavities.

It may justly be premised that no method is so universally applicable to the generality of gun-shot wounds, in civil or military practice, or so fruitful in good results as to preservation of life, limb, or function, or so favored in immunity from untoward results and accidents of surgical repair, as primary antiseptic occlusion.

This method, when applicable, is superior to all others, because it is the simplest, the least annoying to the wound, the patient, and the surgeon; it prevents swelling and pain, it does not interfere with the appetite, for the secretions are not perverted, and the bowels locked up by morphine for relief of pain; it heals in the shortest possible time, it is attended with the minimum rise of temperature, and requires so very little after-care.

Apropos, the writer could mention one case in particular, treated by him and reported to THE MEDICAL RECORD of December 2, 1882, of a very serious gun-shot wound from a cylindro-conoidal bullet of .45 calibre, penetrating the thorax beneath the clavicle in front, and making its exit through the shoulder-blade, causing the pulsations of the subclavian artery to become visible to the surgeon's eye, and lacerating the rich plexuses of veins and lymphatics that abound in the cervical region. This wound-track, five inches in length, healed almost its entire length in seven days under a single permanent aseptic dressing.

It sometimes requires a nice effort of discrimination to decide, in the case of a wound that stands on the border line between infection and non-infection, whether or not it is adapted to the occlusive treatment. But even in these doubtful cases the possible formation of pus after occlusion could be determined by the thermometer and the pulse-beat before any danger should arise to the patient, and drainage could then be instituted.

By observation in an Indian country, and upon inquiry from commissioned officers of companies of Indian scouts, I have learned that the Indian when shot allows the fibrin of the blood to occlude the stomæ of his wound, while he applies a cooling lotion or some mother earth to the injured member, or places alongside of the limb an innocent twig or branch from the cotton-wood, and then proceeds with his incantations and other harmless ceremonies, in the meantime the wound-track knitting under a primary occlusive covering.

One may say the splendid result obtained is due to the Indian's magnificent physique, but the writer has obtained similar results in soldiers wounded after being greatly fatigued by following up trails in an Indian country, and who were four days' march from base of supplies, without suitable food or medication, with absolutely nothing but the application of the all-potent principle of primary antiseptic occlusion, and a splint of plaster-of-Paris to steady a compound fracture, which had to be conveyed for ninety miles in travois over a country that seemed made up of the odds and ends of creation. Here was a compound gunshot fracture of the humerus, an injury sufficiently ominous under the most favorable surroundings, not to mention the deprivations that beset this individual case; but the early occlusion robbed it of its serious omens by rendering it subcutaneous by an artificial skin, and thus transforming it into a simple fracture.

A wound so treated does not invoke the trinity of evils of many non-occluded wounds, namely, suppuration, granulation, and cicatrization. The robustness of the constitution is not so pertinent a factor in a simple fracture or in a compound one, that can be rendered subcutaneous, as in open wounds that drain away highly vitalized fluids; hence, in a weak constitution, the occlusive method is doubly to be desired.

I have a time or two congratulated a patient on his rapid recovery—all honor due to the occlusive method, which shut out the germs that would have tried a robust

constitution and might have caused a weak one to succumb—but invariably I have met with the self-complaisant response: "Oh, doctor, I have such a good constitution, or I should not have recovered." Your constitution to the dogs! Aren't you an inveterate tobacco-user, haven't you had the clap now for the third time, and were you not under treatment for stricture at my hands, and bladder complications, when you were shot down!

I cannot forbear to translate here a few paragraphs bearing upon this most important method of treatment of gunshot wounds—the antiseptic occlusive, by which in doing so little so much is accomplished—from the admirable pamphlet of Karl Reyher, already quoted from:

"Where the conditions are suitable for healing *per scab*, it is of essential importance that the internal examination of the shot-canal be omitted, *i.e.*, that the already closed wound-canal be not again opened, and that its opening in the skin be occluded as quickly as possible. It is of only relative and subordinate value whether one permit the blood in the skin wound to dry up without a dressing, and thus allow the blood-crust—the blood-scab of Hunter—to become the antiseptic preventive against infection from without, or whether one, in order to hasten the drying up, make use of a particular agent, as clean charpie, wool, antiseptic gauze, or hæmostatic wadding; or, finally, whether one cover with protective the small coagulum filling the skin wound, and thereby assign to this the rôle of a scab. Since, however, the occlusion through the protective is not a complete one, as the coagulum lying underneath, for the time being, remains moist, the filling around with antiseptic materials must follow for the perfect protection against decomposition. The essential thing in all these different methods of treatment under the scab consists in the not-probing, in the not-draining, and in the occlusion of the skin wound, and the motive thereto lies in the principle of antisepsis."

And Reyher quotes from von Langenbeck's famous address, "Upon the Shot-fractures of Joints and their Treatment," as follows: "If one intends to adopt the conservative treatment of knee-joint injuries he cannot be too urgently warned against probing of the shot openings with the sound or finger."

Reyher gives his firm advocacy for occlusion in penetrating gunshot wounds of the thorax, and once applied the method successfully in a case of penetrating pistol-shot wound of the abdomen upon the duelling ground, in which the ball lodged in the parietes.

The writer has seen a case of penetrating pistol-shot wound of the lung and pericardium, complicated with pneumonia and pericarditis, recover under an occlusive dressing, *i.e.*, without drainage. Reyher declares that the beautiful results of the occlusive method of treatment of penetrating gunshot wounds of the chest are sufficiently well known, making it (at least) a justifiable procedure.

The method of hermetically sealing gunshot wounds of the chest was given a trial in the War of the Rebellion by Assistant Surgeon Howard, United States Army. It differs in some particulars from primary antiseptic occlusion, in which there is no paring or suturing or disturbance of the blood-crust. If the aspersions of Surgeon Derby, U.S.V., published in the *Boston Medical and Surgical Journal*,[1] are intended to apply alike to "hermetically sealing" and "primary antiseptic occlusion," the writer cannot free himself of the conviction that the language is too severe and the condemnation too sweeping. The language referred to appears in the following paragraph: "In July, 1864, it came in my way to see six cases at one time treated in this manner (hermetic sealing) at the field-hospital of the Eighteenth Army Corps before Petersburg. All six promptly perished. The verdict of army surgeons who have tried this method, I think, is unanimous. Can we not then be done with it—banish it from our books of military surgery, and let it rest with the multitude of exploded theories which have preceded it? A writer in the London *Lancet* some time ago clearly showed that it was unphilosophical. Experience has proved it fatal."

There is a class of gunshot wounds that may be considered unique, and in which, according to the teachings of the lamented J. Marion Sims and many surgeons now living, there is no time for folded hands, and from which cases operative surgery may snatch some of its brightest laurels. I refer, of course, to gunshot wounds of the abdomen. But we must not be unmindful here that we are treading upon hotly contested ground, and that many experienced surgeons assume in these cases an attitude of "expectancy."

A localized hypersecretion is the inevitable and legitimate result of the infliction of any wound. This serous transudation, when it takes place within the peritoneal cavity of the abdomen, seems for some reason more virulent than when it occurs elsewhere, and, according to the experience of J. Marion Sims, readily induces septicæmia and kills through septic blood-poisoning, and not from peritonitis. It fell to the writer's lot to take down notes in a case of post-mortem from gunshot wound of the abdomen, some five years ago, and he distinctly remembers of jotting down the fact, which seemed to him then foreign and irrelative, that the abdominal cavity contained a pint of bloody serum. Death was ascribed to peritonitis. We had not then learned that peritonitis does not kill in the rule; that the exudation of lymph was simply reparative or conservative.

In case, then, of a gunshot wound of the abdomen, especially when septic infection threatens, it would be held by many to be good surgery and a justifiable procedure—perhaps an imperative duty—to open the abdominal cavity, repair any damage done to its contents, and then thoroughly disinfect the cavity and close its parietes.

To the *Medical News* of February 14, 1885, Dr. William T. Bull contributed an article on "A Case of Gunshot Wound of the Intestines, treated Successfully by Laparotomy with Suture of the Intestines," which, together with its discussion before the New York Surgical Society, was full of suggestion and instruction.

It remains to consider the permissibility or non-permissibility of the occlusive method to shot wounds complicated with injury to a blood-vessel. If, in such a case, the hemorrhage is excessive, the blood spirting forth in a full stream, the only indication that exists is, of course, to go down into the wound and ligate and then disinfect and drain. But experience has established the clinical fact that a blood-vessel of large size may be seriously injured by a bullet in its course, and still give rise to no symptoms of hemorrhage, healing taking place per scab, and the diagnosis verified by post-mortem, death having resulted from some cause other than injury to the vessel.

In the writer's own case of gunshot wound of the chest (referred to in preceding paragraphs), the bullet passing just below the subclavian artery and making visible its pulsations, the possibility at least existed that, had the wound not been occluded, but disinfected and drained, the possibly injured coat of the artery might not have been able to recover itself, and by a process corresponding to caries in bone might have lost its vitality and induced secondary hemorrhage. Had such taken place in spite of occlusion, a key and assistant were at hand for employing instant compression of the subclavian behind the clavicle.

One more word for occlusion in gunshot wounds of the joints. The report already quoted from of the Surgical Committee of one of the State Societies contained also the emphatic but erroneous statement that "penetrating gunshot wounds of joints are invariably attended with suppuration." And surely we can say "almost invariably" when the surgeon has had recourse to the probe or finger, or bullet-forceps, but seldom when his

[1] Medical and Surgical History of the War of the Rebellion.

guiding precept has been[1] "*sans* probe, sound, or finger; *sans* extraction of bullet; *sans* drainage; *sans* everything except disinfection of the exterior of the wound, and occlusion of the same," at the earliest practicable moment after its infliction. By this method Reyher obtained beautiful results in penetrating gunshot wounds of the knee-joint (with projectile wedged into the condyle) preserving the function and mobility of the joint.

Much discredit, the writer fears, is brought upon this most admirable method of wound treatment—the primary antiseptic occlusive—by its misapplication to wounds manifestly unsuited for occlusion, by reason of infection, it may be, from foreign bodies, or from having previously been internally examined, or possibly from the nature and configuration of the wound itself.

If the wound is not a fresh and clean one; if the canal has not been shut off from the external world by shifting of the soft parts immediately that the injury took place; or if the wound-track, that has been virtually occluded from the start, is laid open now for the first time by the surgeon's examining finger; or if of necessity the surgeon must go into the wound for the purpose of ligating a bleeding vessel or of removing some palpable object of infection—let not such a wound be occluded. It is an open infected wound, and must be treated as such by drainage and disinfection. These should, if possible, in the interests of such wounds, be primary and radical. Here the maxim aptly applies, "What is worth doing at all is worth doing well." To insure a radical disinfection and subsequent complete drainage it may be necessary in one case to do a partial resection, in another to slit up pockets where fluids may accumulate or pus burrow, to remove splinters of bone, which, if allowed to remain, may intercept the drainage-canal, or it may be that the vitality of the parts is so threatened that drainage must be provided for conducting off large quantities of effete material when nothing less than the large amputation-cut itself may suffice.

The thoroughness of our efforts with which we should strive after complete drainage of infected gunshot wounds is exemplified in a case of compound fracture of the arm, with shattering to pieces of the os humeri from its surgical neck down to its lower epiphysis, causing the arm, to dangle by the side, the soft parts forming a sac in which the crushed fragments could be moved to and fro; other long spiculæ projecting from the patulous shot entrance.

The surgical procedure is thus related by Reyher:

"To the not little surprise of the bystanders I divided the soft parts of the arm in the sulcus of the long head of the biceps muscle, from the shot entrance down to the epiphysis of the elbow-joint, and thus laid bare the shot canal and fracture in its whole length. The wound surface, when the margins of the incision were spread out, was enormously great. In it lay, like a carpet, the separate fragments adherent to the periosteum. I took away those that were entirely released, I removed the blood from every nook and corner; drainage, antiseptic dressing, etc., all on the dressing-place. Healing complete in five weeks."

In gunshot wounds of the thigh where the canal of the projectile lay obliquely, and was hence of considerable length, the almost unsurmountable obstacles against securing adequate facilities for complete drainage quite discouraged Reyher in his attempt to secure through disinfection and drainage an aseptic course to such wounds. Hence his earnest protest and caution against the too ready resort to internal examination of these gunshot wounds of the thigh, when possibly by a judicious conservatism healing may be brought about under an occluding scab—so utterly bad is the prognosis in open shot wounds of the thigh.

On anatomical grounds alone the disinfection of joints and of epiphyseal fractures is much easier of accomplishment than of shot wounds of the soft parts or of the diaphysis of a bone. In the two latter cases the amount of blood poured out is absolutely greater than in the two former instances, owing to the relatively greater vascularity of the bellies of muscles and the shafts of bone through which the nutrient artery runs, than the almost bloodless condition of the tendons and component parts of a joint. Not only so, but—what is of more practical importance—the effused blood in a joint cavity is bounded and restricted by definite limits—the joint capsule; while in a diaphyseal fracture the blood may widely infiltrate the intercellular tissues and wallow beneath and among the muscular planes. How simple to puncture and evacuate the contents of a joint capsule, how many and what extended incisions may be required to cleanse a fracture of a diaphysis!

Seeing, then, that extensive incisions or a resection, or possibly an amputation, may be necessary to insure perfect drainage in an open gunshot wound, it is the duty of the surgeon to have in readiness instruments and dressings suitable for these operations, and on hand at the time the internal examination of a given wound is decided upon, so that these operations may proceed forthwith, immediately that they are found to be indicated, else the examination shall be to no purpose and may prove hurtful rather than beneficial. The partial resection of healthy and uninjured epiphyses of joints may have to be done, and how this can be effected so as to best conduce to drainage, can only be learned from an intimate acquaintance with the anatomical construction of each joint severally.

The clinical and didatic teaching of the subject of handling gunshot wounds—a subject of so great and preponderating interest and importance—should be afforded greater prominence in the curricula of the medical schools of our own country.

Fort Gaston, Cal.

[1] The Medical Record, October 20, 1882. Article by the writer.

OBSERVATIONS ON SOME OF THE MORE UNCOMMON SYMPTOMS AND COMPLICATIONS OF MALARIA.[1]

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In offering the following remarks the writer is well aware that they are far from covering the entire subject of the complications and irregularities of malarial disease. He simply wishes to put on record a series of cases occurring in the course of his practice, which may serve to illustrate the subject denoted by the title of this paper.

1. *Hemorrhages.*—Epistaxis, more or less copious, I have seen in five cases of febris intermittens. It took place in the sweating stage and during the intervals of the malarial paroxysms, and was, in three of the cases, severe enough to require plugging of the nares. Frequent relapses were the rule until the fever was under control and the patient's general condition improved by tonics and change of air.

Of three cases of hæmaturia of renal origin which I have seen coming on with the paroxysm of intermittens, I will give the history of the following as particularly striking:

Major P——, from Georgia, aged fifty-eight, of apparently good constitution, and not, as far as he knew, suffering from malaria before he left home, came to this city in August, 1882. While here he would join his friends and go quite frequently to the horse races on Coney Island. In the afternoon of September 2d I was sent for to see him at his hotel. I found him free of fever, but looking pale, feeling weak, and complaining of pains in the hypochondriac and lumbar regions. During the preceding night he had passed at least a pint, he thought, of fluid blood with his urine, and had voided some more a few hours before I saw him. He had never done so before,

[1] Read before the German Medico-Chirurgical Society.

though he felt somewhat chilly the day before, he does not remember having had malaria for many years.

General examination and exploration of bladder negative. I had the patient put to bed, and prescribed a solution of gallic acid. Saw him again the next morning early. He had passed some more blood during the night, and had now a temperature of 102.5° F., head- and back-ache, etc. At noon he perspired freely, and his temperature became normal soon after. An acid solution of 3 ss. of quinine was administered in the course of the morning, and neither fever nor hemorrhage returned. The quinine was continued in smaller doses, and a week later the patient was able to return to his home in apparently good health.

2. *Hemorrhagic nephritis.*—Of the hemorrhagic form of nephritis in the course of and through the influence of malaria, I have seen but two cases, both in adults. Neither of them had any symptoms of renal disease; they contracted malaria before, but showed the unmistakable symptoms of hemorrhagic nephritis soon after.

In neither case was there much difficulty in eliminating the malarial element by the proper remedies and change of air. Nevertheless, the subacute nephritis passed into a chronic form of Bright's disease. Albumen and casts in small numbers can be found in the urine, and slight hæmaturia occurs from time to time. The man's case is now of three, the woman's of six years' standing. The late Professor Bartels, in "Ziemssen's Cyclopædia," lays much stress upon this grave complication or sequela of malarial disease.

In this connection I may also relate two cases of *acute purulent urethritis*, first coming on together with the malarial attacks in two young men. Both patients presented symptoms of neurasthenia of sexual origin, but were entirely free from gonorrhœal infection. The urethral discharge was painful and accompanied by frequent micturition, and gave them more uneasiness and discomfort than the malarial fever. Mild injections of sulpho-carbolate of zinc did no good, but quinine and Warburg tincture cured them of both evils. Of this rare freak of malaria, Bartels also mentions one or two instances.

3. *Malarial hæmatemesis.*—Of hæmatemesis, in all probability independent of gastric ulcer, I have seen one case. Mrs. W——, about forty-five years of age, stout, but strong and active, had been repeatedly under my treatment for recurrent attacks of parametritis of puerperal origin; her stomach had always been in good condition. Four years since, during her convalescence from one of these attacks, she was taken with intermittent fever, and in the algid state of one of the paroxysms vomited about six ounces of dark fluid blood, intermingled with some soft coagula. This was immediately followed by a dangerous collapse, which it took some hours to overcome by hypodermics of brandy and other remedies. Sulphate of chinin and bromide of sodium (āā gr. v.) given in wafers every two hours until thirty grains of each had been taken, prevented a relapse of the intermittens and the hæmatemesis as well. The patient had another attack of parametritis last year, associated again with malaria, but no bleeding occurred at that time.

I have the record also of two cases of intermittens, concerning young and somewhat delicate women, complicated by repeated paroxysms of rather severe hæmatemesis, which yielded to quinine only. In neither case had any previous symptoms of ulcer or other organic lesion of the stomach been noted.

Intestinal catarrh, characterized by frequent watery, slimy, sometimes bloody stools, and constituting the principal feature in certain cases of subacute malaria, I have seen quite often in children and young persons of both sexes. Of late I have given in such cases quinine and ipecac during the day, and from ten to twenty grains of salicylic acid immediately after meals, prescribing a careful regime as to diet, etc., and have had better success in relieving the patients rapidly, and often permanently, than by giving quinine alone or quinine or opiates, as I did in former years.

4. *Apneumatosis, i.e.*, more or less complete collapse of limited portions of pulmonary tissue in the course of bronchial catarrh, I have seen to accompany the acute or subacute forms of malaria in upward of thirty cases, concerning mainly children and adolescents. The clinical picture of this condition, one example of which will serve as an illustration of all the others, may be described about as follows: We are treating a case of malaria in a child of neither robust nor exactly delicate condition; the patient is better of the fever, but troubled with a slight cough accompanied by little, if any, expectoration; no constitutional disturbance, none of the signs of capillary bronchitis or pneumonia are present; yet we examine the thorax carefully, and find pretty well marked bronchial respiration, posteriorly, above and below the spina scapulæ, on one or both sides. The percutory sounds are not in harmony with the auscultatory phenomena; they may be somewhat dull, but are more often only shorter, of higher pitch, and less full than the normal non-tympanitic sounds. The patient has no dyspnœa. After being relieved of malaria and improved in general health, the bronchial breathing diminished in force and extent rapidly, or more often slowly, and finally gives place to the normal respiratory sounds. It may be two, three, four, and more weeks before this is accomplished, but in every case of this kind—uncomplicated by organic disease—I have observed complete recovery as the final result. Not until I had read a short article on apneumatosis in general, in "Reynolds' Encyclopædia," could I get rid of the bugbear of some alveolar exudation or peribronchial inflammation in trying to understand the above disturbance of the respiratory organs. It is simply a mechanical process, the inspiratory current not being strong enough in such patients to overcome the obstruction caused by the presence of viscid catarrhal secretion in the smaller bronchi, the alveolar residual air becomes gradually exhausted, and a certain area of lung tissue is rendered apneumatic, and more or less completely so.

With the recurrence of respiratory vigor and the removal of the liquefied catarrhal secretions, the collapsed lung tissues are gradually reinflated and brought back to the normal condition. That apneumatosis may occur in the course of constitutional disturbances other than the malarial, I do not deny; I simply want to put it on record that I have seen what I described much more often in the course of that disease than of any other. In the treatment of it, after careful elimination of the malarial element by chinin and stimulants, I have found the tepid half-bath, with cool affusions of thorax, lung gymnastics, fresh air, and tonics containing iron, bark, and strychnia the most serviceable remedies to facilitate recovery.

5. *Sexual disturbances in women.*—With reference to disturbances of the reproductive system in women affected by malaria, I have seen abortion directly traceable to that cause several times, and have on record the case of a strong and healthy woman, the mother of healthy children, who suffered two premature deliveries and came near losing her life by uterine hemorrhage during parturition. All other causes of miscarriage have been excluded in this case. I also remember the case of a woman suffering from intermittens going to her full time and giving birth to a female child that showed unmistakable symptoms of its mother's disease during the first two weeks of its life.

That intermittens will frequently attack lying-in women in malarial districts, and if so, produce rather formidable paroxysms, has been well shown by F. Barker and others, and is often seen by practitioners in this city and vicinity, and generally successfully treated by large doses of chinin together with the bromides.

6. *Disturbances of the cerebro-spinal system.* — The cerebro-spinal system may get into a state of asthenia in those suffering from malaria for some time, particularly

in neurotic or debilitated constitutions. I have seen several such cases of malarial neurasthenia, and found a change for one or two months to the sea or mountains—the selection to be made suitable to the individuality of the case—most beneficial in the restoration of these cases.

Intermittent neuralgias are by no means rare. They affect with preference branches of the fifth pair, particularly the supraorbital, but may also select the sciatic nerve. An efficient dose of aloes and jalap, followed by quinine, grains 15 to 20 to 30, with as much or more of bromide of potassium two or three hours before the attack, I have found most serviceable to effect a cure. A somewhat prolonged course of pil. ferr. cinchonid. et arseni will probably insure the patient against relapse.

A few cases of insanity traceable to malaria have been published, but malarial psychosis in persons free from acquired or inherited neurotic disposition is rare. In this connection I have the history of the case of Henry R——, aged forty, German, married, plumber, twenty years in the United States, resident of Hudson City, N. J., for fifteen years. No hereditary taint, no acquired disposition to cerebral disease by trauma or alcoholism or otherwise was made out; both his parents alive and well, his sisters and brothers also. He contracted intermittens in 1878, suffered frequent relapses, and began to show symptoms of acute insanity about January 1, 1882; became maniacal, and was removed to the New Jersey State Asylum, where he died on January 24, 1882.

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Progress of Medical Science.

Abscess of the Abdominal Wall, containing the Rib of a Rabbit, healing without Intestinal Fistula.—Dr. Jagot reports (*Le Progrès Médical*) that a patient came to him with two pouting fistulous openings in the left groin; there was here also an inguinal hernia. Some two years before, the patient, a baker, aged forty-seven years, was taken with cramps while at his work; this was followed by vomiting; he was confined to his bed for several months. An abscess formed in the location mentioned, was opened, but had never healed. On probing, a foreign body was felt, and with dressing-forceps two pieces of bone were removed, together six centimetres in length, which proved to be the rib of a rabbit. Patient was at the time obliged to eat his meals hurriedly. In five days the fistulæ was closed, and a complete cure followed. The hernia may have assisted in the arrest of the bone: localized peritonitis followed, abscess of the abdominal wall, etc. The fistula discharged at no time anything but pus.

Blackwater Fever.—We are indebted to French naval surgeons for almost all we know of this particular form of fever, which they describe under various names—*e.g.*, *Fièvre bilieuse melanurique*, *F. pernicieuse ictérique*, *F. bilieuse nephrorrhagique*, *F. ictrodes remittens*, etc. English writers on the diseases of tropical climates are singularly silent on the subject. Dr. Farrell, acting colonial surgeon of the Gold Coast Colony, whose pamphlet is printed for the government of the colony, gives a very good account of this fever, with cases and temperature charts. He strongly maintains its paludal or malarial origin. The peculiar clinical features of the fever are that it only attacks those already deteriorated in health. It is very often preceded by simple attacks of intermittent fever, with progressive anæmia and sallowness. The onset is invariably sudden. The quality of the vomit and urine is peculiar. The jaundice is uniformly distributed, not in patches of varying degrees of intensity; it is seen from the very first onset of the disease, and varies with the general condition. The type of accompanying fever is remittent or intermittent, even in the worst cases. The appearance of the face is dejected; the conjunctiva is yellow, but not injected. There is tenderness of the gastro-hepatic region. The pulse follows the fever. It is not contagious. In all these respects it differs from yellow fever. The urine gives no reaction of bile; but, on the contrary, the spectrum of hæmoglobin. Microscopy shows a few altered blood-corpuscles, amorphous granules, a few epithelial casts, triple phosphates, and acid urates. Heat and nitric acid give a variable proportion of albumen. Sodium chloride and acetic acid show the characteristic crystals of hæmatin. The prognosis is necessarily grave. As regards treatment, the author recommends large doses of quinine, calomel at the onset, and occasionally afterwards, in doses of from ten to twenty grains, not only for its action on the liver and as a sedative on the stomach, but as an antiseptic, which may serve to minimize the self-infection which is apt to occur in fevers of this kind.—*London Medical Record*, July 15, 1885.

Postural Method of Treating Dilatation of the Stomach.—Dr. Tytler records the case of a woman who suffered from excessive dilatation of the stomach, producing attacks of vomiting every two or three days. The author tried various remedies to give relief, but none succeeded, until he made the patient lie on her back for two hours after every meal, with a small pillow placed below the buttocks, and kept her on a diet of milk and beef-tea. The vomiting attacks soon ceased, and after a time the patient went about as usual, wearing a tight abdominal belt, and continuing the postural treatment. In the course of a few months her health was completely restored. The *rationale* of this treatment is obvious. Owing to the relaxed and flabby condition of the walls of the over-distended stomach, the food, by its weight, caused a bulging below the level of the pylorus. When the lower end of the abdomen was elevated, the contents of the stomach were brought on a level with the pylorus, and thus they passed on in the natural way.—*British Medical Journal.*

Amount of Sugar in Blood.—Dr. Otto finds arterial blood richer in sugar than venous, the total reducing agent being the same in both, so that there is a reducing agent in blood in addition to sugar. There is a marked increase in the reducing agent contained in the blood of persons under the influence of chloroform, chloral, and morphia. The blood of the child at birth contains about the same quantity of sugar as that of its mother.—*Pflüger's Archiv.*

Nocturnal Incontinence of Urine.—Dr. A. L. Ebermann, of St. Petersburg, in discussing the pathology and treatment of noctural incontinence of urine in children, insists on the necessity of a strict individualization of the cases. He divides the latter into five categories: 1. Incontinence of urine from failure of sphincter; 2. Incontinence from increase of contractile strength of the detrusor; 3. Incontinence from diminution of capacity of the bladder, which diminution results from the patient's adhering to the infantile habit of very often voiding urine; 4. Incontinence from atony or hyperextension of the bladder; 5. Incontinence from irritation of the vesical cervix by stones. The first variety of the cases may be recognized on the ground of—*a*, inability of the patient to retain urine also during daytime; and, *b*, easy penetration of a *bougie à boule* into the bladder. The second form may be determined by—*a*, powerful ejection of water injected into the bladder; and *b*, pain felt by the patient when he tries to retain urine in presence of a call for micturition. The third category is diagnosed also by means of injecting water into the bladder; when the capacity of the bladder is diminished, the viscus admits only a certain small quantity of fluid, corresponding to the usual quantity of urine voided by the patient at a time; on injection of a surplus, the fluid flows back more or less rapidly, according to the degree of pressure on the piston of the syringe. Atony of the bladder is easily recognized from the escaping of a large

quantity of urine through a catheter introduced immediately after spontaneous micturition. The fifth group of the cases is diagnosed by the sound. As to the treatment, Dr. Ebermann recommends for the first group the administration of nux vomica or strychnine, the ascending *douche* to the perinæum, and, above all, electricity in the shape of faradization, or, in obstinate cases, interrupted galvanization, the cathode being placed at the perinæum, the anode at the hypogastrium or sacrum; for the second group, belladonna in increasing doses (beginning with 6 centigrammes five or six times daily); still better, chloral, and in anæmic children solution of perchloride of iron; for the third group, exercise of the patient's control over the bladder, intravesical injection of warm water in gradually increasing quantities; for the fourth, frequent catheterization, vesical injection of water, and electrization; for the fifth, lithotomy or lithotrity.—*London Medical Record*, July 15, 1885.

Rupture of the Aorta.—Two cases of rupture of the aorta are reported in the *Bristol Medico-Chirurgical Journal*, July, 1885. The first case, recorded by Mr. A. Prichard, was that of a man, aged fifty-eight years, who, while turning round in bed in the middle of the night, felt something give way in his chest. He became sick and faint, and continued so until he was seen the next afternoon, when the vomiting was accompanied by the ejection of a thin bloody fluid. The surface of the body was cold and the patient was collapsed, yet restless, like an individual suffering from hemorrhage. Death took place the next day. At the autopsy the pericardium was found to be distended with clotted blood, and a rent was detected in the convexity of the arch of the aorta. The rupture was an inch and a quarter long. The edges of the rupture of the outer and middle coats were ragged, but the division of the inner coat was clean cut. There was no notable dilatation of the aorta, but the tissues were thin and soft, and some apparently fatty patches were seen through the lining membrane. There was no general atheroma. The heart was large and flabby, and infiltrated with fat externally. The cardiac valves were healthy. The second case, reported by Mr. Paul Bush, was that of a young postman, aged eighteen years, who had been rowing and was sitting down in the end of the boat, when his companions noticed that he looked very ill. Death took place before he could be put ashore. There was no blood in the pericardial sac. The heart weighed nearly fourteen ounces. The muscular walls, valves, and orifices appeared to be healthy. A rupture was found extending through the internal and middle coats of the aorta immediately above the anterior aortic valve. The rent appeared to start from this site and spread spirally round the aorta in an ascending direction; its entire length was equal to one complete circumference and a quarter. The fibrous coat of the great vessel had been separated from the middle coat, both upward and downward. Sections of the aorta and cardiac substance appeared to be normal when examined microscopically.

Puerperal Convulsions without Albuminuria.—Dr. N. Vuccino gives the case of a lady usually enjoying excellent health, except for occasional hysterical attacks, who in the fourth month of her first pregnancy was seized with a severe frontal hemicrania of quotidian type. At the end of the sixth month she was awakened one night with intense pain in the head, followed by a slight convulsion affecting the upper extremities. In the morning the writer found her suffering from general convulsions, consciousness being lost, and a bloody froth issuing from the mouth; the pulse was small and hard; but the urine was then, and continued to be, perfectly normal. Various methods of treatment having proved fruitless, it was decided to bring on the labor, which was done by injecting hot water (32°). After this had been continued for three hours and a half, the os uteri became fully dilated, and a dead child was shortly afterward expelled. The convulsions ceased as if by magic, and in twelve days she was able to resume her household occupations. She afterward enjoyed good health till the eighth month of her second pregnancy, when convulsions reappeared with greater intensity than before. Chloral and chloroform proving inefficacious, the continual hot vaginal douche was again employed. In consequence of the irregularity of the contractions of the uterus, forceps were required. The convulsions ceased five hours after delivery, and in seventeen days she was again in her normal condition. She subsequently became pregnant for the third time, and during the second month suffered from some premonitory convulsive symptoms, which were increased by vaginal examination; these came to an end on the patient aborting. The author considers the case interesting, as showing how convulsions, due, as he believes, to a highly nervous condition of the uterus, may simulate those connected with renal and urinary mischief. —*The Lancet*, July 18, 1885.

Death from the Sting of a Bee.—The *Medical Press*, July 15, 1885, announces that an ironmonger died recently from the sting of a bee, which attacked him while walking in his garden a fortnight previously. The insect stung the deceased in the neck, and soon afterward the parts swelled considerably and progressively, with the result given. It is rare for such accidents to have a fatal termination, though it is not difficult to conceive such a constitutional state as should render any one so poisoned locally liable to risks affecting even life itself. In this case, probably, inflammation extended along the lymphatic system into what Mr. Bryant very properly terms the dangerous region of the neck, where œdema and possibly suppuration into the cellular tissues around led to interference with the respiratory process.

Latent Pericarditis and Sudden Death.—Drs. Sturgess and Wilkin report a case of fatal pericarditis in which the symptoms were so latent and obscure (*The Lancet*, July 25, 1885) that no suspicion of disease was entertained up to the moment of death. Harry E. B——, a dark, rosy-cheeked boy, aged seven years, and one of a large family, with a perfectly healthy history, had never suffered from rheumatism, scarlatina, or in fact from any illness except chicken-pox, and was accustomed to indulge freely with his brothers in athletic games, no suspicion having ever crossed the minds of his parents that he was not in perfect health. On May 6, 1884, after returning from morning school, he dined heartily at 1 P.M., and immediately afterward commenced to play cricket. This he continued to do until it was time to go to afternoon school, about 2.15 P.M. He then ran with two of his brothers a distance of about a quarter of a mile, and on arriving in the playground he suddenly fell down. The master, who saw him fall, ran to pick him up, and, finding he was insensible, carried him into the house and laid him flat on a table, undoing his collar and bathing his face with cold water, while medical aid was sought. Dr. F. Sturgess arrived about five minutes afterward and found him apparently dead, and, perceiving the many difficulties of the case, sent for Dr. Wilkin, meanwhile performing artificial respiration by Silvester's method. A few minutes later Dr. Wilkin arrived, and after about ten minutes artificial respiration was given up, there being no sign of returning life. The physicians were told that the boy had breathed heavily two or three times after he fell. This fact negatived the momentary surmise of possible complete occlusion of the larynx by some foreign body. Death from the brain must also be excluded in a subject so young. Sudden failure of the heart's action was therefore the only conclusion they could come to under the circumstances. But why the heart should fail in this boy, who looked the picture of health and vigor, they could not explain, and there was no history or reason to suppose he had sustained any blow or shock over the solar plexus. At the autopsy, on opening the abdominal cavity a full stomach was found; the colon was distended with flatus, and the sigmoid flexure was

loaded with fæces; the kidneys and other abdominal organs appeared healthy. On opening the pericardium a fibrous band was found, about an inch broad and the same in length, forming a connecting link between the left apex of the heart and the pericardium, covering the surface of the diaphragm. Numerous other string-like adhesions were seen, particularly on the left side and base of the heart, and there was also some recent lymph, but no serous effusion. These bands were evidently of recent date, as the heart required careful handling to avoid breaking them down. The left ventricle was decidedly hypertrophied, making every allowance for rigor mortis; it was completely empty, as was also the left auricle. The right side of the heart contained some liquid blood, but there was no clot either there or in the pulmonary artery. The valves were all perfect, and there was no endocarditis. The lungs were normal in every way. The cranium was not opened. They were not able to obtain any urine for examination, though there was no reason to suppose it would have given anything but negative results. The immediate cause of death in this case must no doubt be attributed to defective innervation of the heart, which was very greatly embarrassed, not only by the adhesions and impediments within the pericardium, but also by the loaded and distended condition of the abdominal organs, and thus it succumbed under the unfortunate strain it was subjected to.

Bicarbonate of Soda in Tonsillitis.—In the *Australasian Medical Gazette* Dr. Kendall, in referring to this subject, says that he has been in the habit of using the drug for the last four years, and as yet it has never failed to produce a good result. The remedy was introduced to the profession by M. Gine, of France. He claimed that by the use of the drug he was able to cut short an attack of tonsillitis twenty-four hours after the application of the powdered salt to the tonsil. Such a rapid cure has, however, never occurred in Dr. Kendall's practice, but he has had very good results in thirty-six hours and forty-eight hours, although in elderly people the attack has lasted five or six days. The drug is, he thinks, well worthy the attention of the profession on account of the absence of baneful properties, and is without doubt useful in cases of inflammatory sore throat due to the influence of cold on an exhausted nervous or muscular system.

Congenital Tuberculosis.—Professor Johne remarks that, though the occurrence of tuberculosis had often been observed, both in the human infant and the calf, so soon after birth as to lead to the conclusion that it was inherited from a parent known to be tuberculous, it had rarely been possible in the human subject to obtain a *post-mortem* demonstration of the presence of the bacilli early enough, or, in either case, to otherwise exclude the possibility of extra-uterine infection by means of the milk. The author having requested a number of his friends to send him any fœtuses of tubercular cows that might come under their notice, received, on February 20th, of this year, from Mr. Misselwitz, a veterinary surgeon at Chemnitz, the lungs and liver of an unborn fœtal calf, in the eighth month of intra-uterine life, whose mother had been slaughtered on account of advanced pulmonary tuberculosis. In answer to his inquiries, Mr. Misselwitz assured Dr. Johne that the uterus and placenta were free from the least trace of tubercle, and that all the fœtal organs, with the exception of the lungs and liver, were quite healthy. Dr. Johne found the lungs of normal size, color, and consistence throughout, except that in the hinder side of the upper lobe of the right lung there was a yellowish-gray well-defined nodule, of the size of a pea, the overlying pulmonary pleura being somewhat clouded; and on section, four more nodules, not larger than millet-seeds, were seen, cheesy, and partly calcified, embedded in a grayish, firm, and apparently homogeneous material. The bronchial glands, larger than hazel-nuts, were mottled superficially, and filled with cheesy, partly calcified yellowish nodules, of the size of small peas. The liver, otherwise normal, was studded throughout with countless miliary tubercles, the smaller gray, the larger cheesy within and partly calcified externally. The condition of the portal glands was the same as that of the bronchial glands, though more advanced. The naked-eye appearances were unmistakable; but the microscopic examination and staining of the various preparations displayed in the most characteristic manner the typical structure of bovine tubercle, as well as the presence of the bacilli in the giant-cells, and most abundantly where the caseated parts were in contact with the outer layers of epithelium-cells. In no part were any spores detected. Dr. Johne believes that this is the first unequivocal case of intra-uterine tuberculosis on record; even Dr. Croker's case, three weeks after birth, having been conceivably one of infection. The more advanced state of the tubercular process in the liver and adjacent glands than in the lungs would naturally follow the entrance of the bacilli with the placental blood by the umbilical vessels. Dr. Johne supposes that they were transported from the maternal to the fœtal circulation through the walls of the placental vessels, by the penetration of the latter by the leucocytes in which they were contained. Soon set free by the breaking down of the leucocytes, they lodged themselves in the lymphatic structures around the portal vessels, setting up multiple tubercles, comparatively few being carried onward to the lungs, and there only at a later period.—*London Medical Record.*

Antidotes for Strychnine.—Lewin states that nitrite of amyl is not a true antidote to strychnine, it only retards the fatal issue, and as soon as its effects pass away the tetanic spasms recur. Faucon and Debierre have recommended the employment of iodine and of tannin. These drugs form, with strychnine, a very slightly soluble substance, so that the action of the poison is suspended for a time. Then an emetic can be administered, and immediately afterward hydrate of chloral. The latter can be given in very large doses. Faucon and Debierre gave, in one case of strychnine poisoning, nearly two ounces of chloral in the course of fifty-nine hours.—*Annales de la Société Médico-Chirurgicale de Liège*, July, 1885.

Resection of the Ankle.—Dr. P. Liebrecht, of Liège, describes an operative procedure which he has recently devised for resection of the tibio-tarsal articulation in cases of fungous arthritis (*The London Medical Record*, July 15, 1885). The methods that have hitherto been practised are all, he states, attended with much labor, in consequence of the difficulty in exposing and dividing the numerous ligaments of the ankle, and are apt to cause injury to the tendons, vessels, and nerves around the joint. The following is a description of the author's method, which, however, has up to the present time been performed only on the cadaver. The skin incision is made from the middle of the posterior border of one malleolus to the middle of that of the opposite malleolus. The tendo Achillis is then divided on a director. A second division, perpendicular to the first, is now made along the inner border of the tendo Achillis. This is about two and one-half inches in length, and, passing downward, almost reaches the inner tuberosity of the calcaneum. The soft structures between the tendon and the bone are now dissected away, so as to expose the capsule of the joint and the posterior peroneo-astragaloid ligament. On excision of these ligaments, the astragalus and the lower extremity of the tibia are exposed to view, and also the line of articulation between these bones, and, below this, the astragalo-calcanean line. The tendon of the flexor longus pollicis is then displaced inward from the posterior surface of the tibia, and all the tendons, vessels, and nerves situated behind the two malleoli can now be easily pushed forward, so as to expose the whole of the posterior aspect of the joint. If the bones be hard, as is mostly the case in the cadaver, the

posterior surface of the astragalus, at one of its borders near a malleolus, should be attacked with chisel and mallet. A notch should first be made along the whole width of the bone, so that by subsequent action of the chisel the upper portion of the astragalus may be removed in one piece. If necessary, one or more slices of bone may be afterward removed. The end of the tibia, if diseased, may be excised in a similar manner. If the diseased bone be very soft, it may be scooped away. The articular surfaces of the malleoli having been exposed, they may be scraped or removed with the chisel. The lateral ligaments may now be divided with a blunt-pointed bistoury. If any fragments of the astragalus remain adhering to the capsule or ligaments, they should be torn away with forceps. A large cavity is thus formed, at the bottom of which is found the articular capsule of the front of the foot, which may be readily scraped, or, if necessary, excised with scissors. If the loss of bone be not very great, and particularly if the malleoli have been partially preserved, the cavity may be left to become filled up by granulations; and then, after recovery, the patient will have a foot that is almost normal. When it has been found necessary to remove much bone, the opposed osseous surfaces of the leg and tarsus should be fixed together, so as to attain osseous ankylosis. Finally, the divided extremities of the tendo Achillis and edges of the external wound should be brought together by sutures. Dr. Liebrecht claims for this operation the following advantages: It does not cause any serious primary lesion, or necessitate any useless sacrifice; the soft parts and the periosteum are not bruised in the course of the operation. It offers more chances than the other methods of preserving a limb of normal form, and better assures the integrity of its functions. It may be easily and quickly performed. Owing to the position of the wound, the discharge of secretion will be effected without any difficulty, and the process of repair will be carried on much more rapidly.

Destruction of the Cochlea without Loss of Hearing.—The loss of the cochlea is usually supposed to be equivalent to a complete loss of the power of hearing, but a case related by Grüber to the Vienna Medical Society would seem to prove that this is not so. A youth, fifteen years of age, came under Professor Grüber's care on account of chronic otorrhœa and polypi in the left ear. He had much pain, and there was paralysis of the left facial nerve. The polypi were removed, and during the operation the necrosed cochlea also came away. Soon afterward the patient's condition began to improve, pain ceased, and the facial paralysis diminished. The left ear not only regained the power of recognizing sounds, but even of distinguishing musical notes. Two similar cases have been reported, one by Cassels, of Glasgow, and the other by Christinneck, of Halle. The labyrinth has hitherto been regarded as a sort of *noli me tangere*, but these cases prove that the entire cochlea may be lost, and still the power of hearing be preserved. —*Gazetta Medica di Roma*, July 15, 1885.

Tricuspid Stenosis.—Professor Torres Homem relates, in the *Revista dos Cursos Praticos e Theoricos do Rio de Janeiro*, vol. i., No. 1, a very rare case of stenosis of the right auriculo-ventricular valve unassociated with insufficiency. The patient was a man, thirty years of age, who had suffered from two attacks of acute articular rheumatism, and was also a hard drinker. He had never had syphilis nor any pulmonary affection. He was obliged to handle heavy sacks of coffee, and on one occasion, after severe muscular effort, he noticed a slight œdema of the lower extremities. This continued to increase until, at the time of admission to the hospital, there was excessive general anasarca of the entire body. Dyspnœa was not very pronounced, and there was no severe cough. A few subcrepitant râles could be heard at the base of both lungs. The urine was free from albumen. The pulse was small but regular. The jugular veins were large, and undulatory movements were noted in them, but there was no true venous pulse. There was a very pronounced increase of the precordial area. On auscultation a short and plainly diastolic murmur was heard during the first two days of the patient's stay in the hospital. But on the third and subsequent days, up to the time of his death, the murmur was presystolic, being heard just at the end of the period of rest, and immediately before the commencement of the ventricular systole. Its seat of maximum intensity was just at the union of the sternum with the ensiform cartilage, and was propagated along the right of the sternal border and slightly also to the left. Nothing else abnormal could be heard in any part of the heart. At the autopsy there was found to be a fibro-cartilaginous ring encircling the base of the tricuspid valve, narrowing it so as hardly to admit the extremity of the little finger, but there was no insufficiency. The other valves were normal. The lungs were œdematous. This case is very interesting as a pathological curiosity, for uncomplicated stenosis of the tricuspid is such a very rare lesion that both Peter and Constantin Paul have denied its existence, and other writers have expressed doubts as to its possible occurrence.

Treatment of the Hysterical Attack.—Dr. Albert Ruault relates, in *La France Médicale* of July 25, 1885, a simple method which he has found very efficacious in controlling an hysterical fit. It consists in making firm and constant pressure over the supraorbital nerve at its point of emergence from the supraorbital foramen. The head is held securely between the palms of the hands, while pressure is made over the nerve on each side with the thumbs. The writer says that the patients under this treatment first contract the facial muscles with an expression of pain, cry out, and then take several quick successive inspirations. The breath is held for a few seconds, and then, with a long expiration, the muscles relax, and the attack is ended. The pressure of the thumb should now be relaxed, otherwise it may have the opposite effect and excite another convulsion. Pressure over any nerve-trunk at the point where it becomes superficial will have the same effect; but the supraorbital nerves are chosen because of their convenient situation.

The Differential Diagnosis between Indurated Chancre and Herpes.—It sometimes happens that herpes of the penis presents itself under the form of a single patch of superficial ulceration, accompanied by some induration of the underlying tissues; there may be also a swelling of the inguinal glands, so that the diagnosis between this so-called chancriform herpes and some forms of indurated chancre is very difficult in the early stages. Dr. Leloir, however, calls attention to the fact that when a herpetic ulcer is pressed between the fingers a drop of serous fluid is squeezed out (*The British Medical Journal*). This manipulation can be repeated several times with the same effect; in the case of chancre, on the contrary, a little fluid is seen on the surface, but the quantity is not increased by pressure. When the base of the herpetic ulcer is indurated, the hardened tissues can be flattened between the fingers, while, in chancre, no amount of pressure can change the shape of the nodule. This difference is explained by the fact that in herpes there is a localized œdema of the tissues, while in chancre the chief lesion is a hard infiltration, sometimes accompanied by sclerosis of the connective tissue and of the vessels.

Bedside Testing for Albuminuria.—Mr. G. P. Best describes, in the *British Medical Journal*, an ingenious plan for testing urine. He dips a syringe into the chamber-utensil and draws up a small quantity of the urine, and then, inserting the nozzle of the syringe into nitric acid, sucks in a drop or two of that fluid; the well-known hazy line at the touching point of these two fluids indicates the presence of albumen.

Poisoning by Extract of Conium.—*The Lancet*, July 25, 1885, gives the following account of a case of poisoning by conium. It concerned an infant, aged eight months, who, with the exception of irritability from teething, was in good health at the time the fatal dose was given. To allay the fretfulness, a physician ordered a mixture containing one drachm of extract of conium, one drachm of bromide of potassium, and an ounce and a half of chloroform water, one tablespoonful to be given every four hours until sleep was induced. The prescription was taken to a chemist's, who, recognizing the unusual dose for so young a patient, contented himself with cautioning the father against giving too much of the mixture, remarking at the time that "no doubt the doctor meant a *tea*spoonful, and not a *table*spoonful." Accordingly, a drachm of the mixture was given at eight o'clock P.M. The effect soon became manifest, and by half-past eleven the symptoms were so alarming that another physician was hastily summoned. On his arrival he found the lower extremities completely paralzyed, occasional twitchings of the arms and head, but no decided convulsion, marked dilatation of the pupils, lividity of the face, and diaphragmatic breathing. At that period he appears to have recognized the hopelessness of the case. Mustard poultices were applied, and attempts made to induce vomiting, but without effect. Death occurred at three A.M., on the following day, seven hours after the medicine was taken. There was no vomiting. At the inquest, the physician first in attendance admitted that he had made two mistakes in the prescription: first, in writing a tablespoonful instead of a teaspoonful for a dose; and, secondly, in ordering the extract of conium instead of the succus. He could in no way account for this. In his opinion death was due to asphyxia from idiopathic convulsions, and not from the action of the drug. He quoted from the writings of Harley and Farquharson to show that the *extract* is comparatively inert and totally unreliable. Mr. Pepper, who conducted the post-mortem examination, and analyzed the mixture and contents of the stomach, deposed that the body was well-nourished and showed no traces of organic disease. The organs generally were much congested. The brain presented marked increase of serous fluid in the ventricles and beneath the arachnoid. The membranes of the spinal cord were strongly injected. The right side of the heart was distended with semi-coagulated blood. The bases of the lungs were gorged with blood, and the surface marbled with patches of congestion, collapse, and acute emphysema. The surface of the liver presented numerous groups of punctate extravasations. The bladder was empty. The alimentary canal was free from all signs of irritation. In the stomach were about eight ounces of thick, grayish-yellow, pultaceous matter, consisting, apparently, in chief part of altered milk. There was no noticeable odor beyond the ordinary sour smell of gastric contents. On adding some liquor potassæ, and boiling, however, a strong smell like that of mice was developed. An ethereal extract yielded on evaporation green oily drops, consisting of vegetable coloring matter and the alkaloid conia. The latter gave, with hydrochloric acid, an abundance of acicular and stellate crystals. Several other tests furnished affirmative results. Mr. Pepper, whilst admitting that the extract of conium was of uncertain composition, and therefore untrustworthy in its administration, and, further, that a much larger quantity than the officinal dose was required to produce the characteristic effects, could but conclude from the evidence tendered by Mr. Freeman, the physician last in attendance, that the actual cause of death was asphyxia from paralysis of the respiratory muscles. The maximum dose for a child eight months old would be about one-twelfth that for an adult; consequently the deceased took ten times the full quantity ordered by the Pharmacopœia. The fact that the stomach contained a considerable quantity of food explains the somewhat protracted course of the symptoms, whilst the absence of vomiting conduced to the fatal issue. *The Lancet* believes that the above is the first recorded case in which death has ensued in the human subject from an overdose of any of the authorized preparations of conium.

Respiratory Croaking of Babies.—Dr. Samuel Gee has seen about a dozen cases of what he calls respiratory croaking in babies ("Saint Bartholmew's Hospital Reports," vol. xx., 1884). Breathing is accompanied by a croaking noise, which seemed to Dr. Gee to have the characters of stertor more than of stridor; or, in other words, the sound seemed to be produced in the fauces and not in the larynx. The croaking usually accompanies inspiration only, but in one of the cases it accompanied expiration only. The noise is constant, both when the child is awake and when she is asleep; yet it may cease for a short time now and then. The tone of the cry is natural, and this is another reason for believing the noise not to be laryngeal. No dyspnœa, no recession of chest-wall during inspiration. Fauces look natural. The noise continues when the nose is pinched. The croaking has nothing whatever to do with the crowing of laryngismus stridulus; the two disorders resemble each other in no respect, except that there is a noise produced in each. The ages of Dr. Gee's patients ranged from three to nine months. It is a remarkable fact that all of them were girls. The general health of some of the children was good, but most of them were weak and sickly. Two children suffered from congenital disease of the heart, and one was an idiot. In some of the children this croaking began at or soon after birth, and in no case did it last much beyond the end of the first year. There is no special treatment; indeed the disorder causes more annoyance to others than to the child herself.—*The Boston Medical and Surgical Journal*, August 13, 1885.

Changes in the Eye in Cholera.—Even in the early stages of cholera there is cyanosis of the eyelids, and when this condition becomes general it is always more marked in the lids. Difficulty is experienced in closing the eyes, and there is almost always a space between the upper and lower lids, leaving exposed a portion of the sclerotic. The lachrymal secretion is greatly diminished, so that even in the agony caused by the cramps no tears are seen to flow. In all grave cases in which palpebral occlusion is difficult there is an injection of the lower portion of the conjunctiva corresponding exactly to that portion which is left uncovered by the lids. In the stage of reaction there is sometimes seen a general hyperæmia of the conjunctiva, due to the presence of an actual catarrhal inflammation. Dr. Joseph has occasionally observed ecchymoses in the inferior portion of the conjunctiva, which he has learned to regard as foreshadowing a fatal issue. In some very severe cases, toward the end of the algid stage, a lesion is seen in the lower portion of the cornea, which may be regarded as a partial necrosis. There is a loss of substance in the cornea, producing a small round ulcer of a gray opacity, which may increase later. Graefe regards this as a neuro-paralytic keratitis. Of fatal prognostic import are the black or dark-bluish spots in the sclerotic along the inferior border of the cornea. They are of irregular shape and may be discrete or confluent. These are independent of the ecchymoses in the conjunctiva and may appear suddenly without any previous conjunctival affection, and even in parts covered by the lids. In the algid stage, according to Graefe, the pupils are moderately contracted, a phenomenon which he attributes to paresis of the sympathetic. Finally, the alterations observed in the retinal circulation consist in an extreme contraction of the arteries. The veins are indistinct, but unchanged in their calibre. There is, however, never complete ischæmia of the retina, and it is uncertain whether the transitory blindness, occurring at the commencement of the algid stage, can be explained by the changes in the retinal circulation.—*La Crónica Médica*, July 20, 1885.

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ENDOWMENTS FOR MEDICAL INSTITUTIONS.

IN an article published in the September number of the *Popular Science Monthly*, under the title "The Present Aspect of Medical Education," Dr. William Gilman Thompson makes an earnest plea for the endowment of medical institutions, and he gives us some interesting statistics on the topic, abstracted from various educational reports of recent date. The history is traced of the emancipation of exact medical science from the superstitions of mediæval times, and there is shown the wonderful revulsion of public opinion which has occurred in regard to some of the aspects of practical medical work. One hundred years ago it was impossible, the writer tells us, to obtain bodies for dissection except by stealth, and even now, in some of our Western States, occasional outbreaks of body-snatching occur. Contrast with such a state of affairs our present well regulated law in New York, where, under full legal protection, an abundant supply of material is easily obtained.

From the article in question we learn that the endowments of our medical institutions are comparatively small. Eighty-seven "regular" colleges report funds amounting to $350,000, with an annual income of $20,000; sums most meagre in comparison with the endowments of our classical institutions, and relative to the importance of medical work. There is, however, we think, a well-defined reason for this difference. Most of the endowments of our great colleges have come from graduates thereof, whose generosity has been the outgrowth of a sort of feeling of personal affection for their Alma Mater. This personal feeling springs from several different sources. The strong social element in the undergraduate life of our academic institutions, and the formation of lifelong friendships, contribute more perhaps to the establishment of this Alma-Mater feeling than does the sense of benefits received. This may argue a very low estimate of educational advantages, but we believe that these facts are essentially true. Now, in the course of medical instruction as it is at present, and doubtless always will be, carried on, there is no soil in which such a feeling may take root. There is no social side to the college life in the academic sense. The personal relation between instructors and instructed are more distant. Hence the powerful incentive to giving before mentioned is absent.

It is true that, on purely ethical grounds, it is for the advantage of the wealthy classes in any community to equip its medical institutions as thoroughly as possible. Much more, even for their personal interest, should such be the case; but the average man of means regards his own responsibility in this direction as so remote that it soon ceases to be any responsibility at all.

Dr. Thompson decries the establishment of so many small medical colleges, particularly in the West. No less than fifty-one have been started and given up during the last century. Some of these, in former decades, did good work. They filled a then existing want. Having accomplished their purpose they vanished. The expansion of the country brought about a new educational environment, so to speak. Under this change of conditions the old principle of the survival of the fittest operated with its usual result. Let us not underestimate the value of some of these earlier institutions. They turned out well-balanced men who could and did successfully grapple with the problems of their times; who better estimated, perhaps, the physiological factor of disease than some of us whose attention seems wholly bent on its physical aspects.

We think that before the community becomes fully alive to the necessity of endowing medical institutions, the faculties thereof must initiate the spirit of self-sacrifice. Many of our medical colleges are essentially chartered companies, the faculties being the stockholders who draw their dividends out of the students' fees. Too often, the principle of competition, a veritable "cutting of rates," comes in to hinder any advancement toward a higher plane of scholarship: the more students, the more fees and larger dividends. The low standard of graduation is only too painfully apparent. Students are allowed to enter at too early an age and with insufficient preparations. True reform in all these directions means, for some years at least, a diminution in the number of students. For contracting this lessening of receipts, and for conducting the institution properly, must the endowment fund suffice.

We do not think it entirely erroneous that a medical college can flourish apart from a large city. There are several institutions in the country, apart from those in the cities, which have always been noted for the excellence and thoroughness of their theoretical instruction. Their graduates generally supplement this by a season's residence at some large medical centre, where they well attest the superiority of their previous training.

We regard the signs of the times as most cheering, in regard both to the ultimate raising of the standard of graduation, and to the realization by the community of its own individual relation to the medical college. The history of endowments well illustrates the Scripture truth, that "to him that hath shall be given." May we not hope that the tide of benevolence will soon more strongly set in to placing our well-matured institutions on a solid, independent financial basis?

RESULTS OF INVESTIGATIONS REGARDING SOME NEW DRUGS.

THE Connecticut State Medical Society has undertaken a work of collective investigation which is likely to lead to results of some practical value. A committee appointed by the said Society has issued circulars of in-

quiry on the subject of certain new drugs which have lately been put on the market with more or less strong endorsements. The answers so far obtained relate to convallaria maialis, piscidia erythrina, cascara sagrada, and certain of the oleates.

The conclusions reached are by no means positive, but are at least valuable and suggestive.

With regard to convallaria maialis, fifty replies were received. The testimony was to the effect that convallaria does not have any cumulative effect, that it rarely disturbs the stomach. It appears to be milder and less certain in its action than digitalis. It is doubtful whether it has much diuretic effect.

Piscidia erythrina, or Jamaica dogwood, has been announced as a drug having hypnotic and anodyne effects. The thirty-two answers received by the committee show it to be very doubtful whether any such properties exist to a sufficient extent to warrant its introduction into medicine. The specific effects are sometimes obtained, but not with any certainty. On the other hand, it is possible that too small doses were given on account of a supposed danger in its use.

Cascara sagrada is a remedy that has been widely used and well spoken of. Its effects are those of a stomachic tonic and laxative. The forty-seven replies obtained by the committee hardly sustain the view that this drug is a superior one for use in habitual constipation. Many find that it is useful, but few think it in any wise specific. A majority did not find its effects diminished by constant use. Dr. Thomas H. Russell, who made a number of careful observations speaks most highly in its praise. He advises its use in doses of from fifteen to thirty drops of the fluid extract three times a day. On the whole, it is safe to affirm of cascara sagrada that it is one of the best medicines for habitual constipation.

The contributions to the subject of the oleates are sufficient to justify any conclusions as to the special superiority of these preparations.

The Connecticut Medical Society has entered upon a useful line of work, and we trust it will continue its investigations. Well-organized medical societies can by means of collective investigations in certain lines do as much as the city professor with his hospital wards. There needs to be only a careful selection of subjects, and, so far as possible, some personal knowledge of the character of the workers. Some men have no power of weighing evidence and reaching sound conclusions. It is this fact that limits the usefulness of collective work, and makes it necessary for those conducting it to be extremely careful.

CORPORATE MEDICAL TREATMENT.

In a thoughtful address delivered by Mr. Rawle, a prominent Philadelphia lawyer, before the Phi Beta Kappa Society at Harvard, attention was called to the fact that in the law a great deal of the work formerly thrown in the hands of young lawyers is now done by corporations. The fact was used to illustrate the greater difficulties now encountered by educated young men in gaining a foothold in a profession.

Medicine, to a greater extent than the law, has of late broadened its opportunities and extended its work. Despite sanitary science there seem to be just as many ill, and perhaps there is much more of introspective invalidism and trivial doctoring. But, like the law, medicine is tending to do more and more of its work through corporations; and the young doctor, as well as the young lawyer, soon runs afoul of these. In great cities nearly one-fourth of the population is treated annually through the beneficence of incorporated dispensaries. Hospitals for every class of diseases are being built, and there is an increasing tendency for those even who are well-to-do to go to such institutions when taken ill.

It is not, however, these institutions, but a new phase of corporate medical development to which we wish to call attention. A correspondent has sent us a number of documents setting forth the existence, purposes, and mode of procedure of a certain quack "Remedial Agency" that is flourishing in this city. It consists of a "medical consulting board of seven members," a business manager, a corps of stenographers, etc. The medical men include one or two who have formerly been known in the ranks of the regular profession. This interesting corporation advertises itself liberally, appealing, it appears, mainly to the sexually distressed. Upon application for treatment being made by a patient, an answer is promptly given inclosing a blank form for the patient, to be filled out, asking for a sample of urine, and assuring the inquirer that a cure can be made "after a course of treatment." The data being obtained, another letter and a variety of medicines and appliances is forwarded along with a circular form containing explicit directions as to treatment.

This latter is a highly interesting document. "You will," it says, "by direction of the Medical Director use the remedies as follows:

"No. 1 course every night, No. 2 course, every morning. Pre-marital course, every morning and night. The cradle-compressor to be worn during the day." An "abdominal electro-girth" is to be worm *pro re nata*, a "tissue is to be applied to the glans penis night and morning," a magnetized voltaic pile, a "developmental lotion," and certain blood and liver pellets are among the resources of this interesting establishment. The patients are sagely advised to bathe at least twice a week, and dumb-bells are recommended as advantageous.

Accompanying this document is an itemized bill, by which we learn that the cradle-compressor costs $6, the pills $14, and the "courses" respectively, $20, and $15, making a total of $55. This seems certainly more profitable than selling patent medicines at a dollar a bottle.

It is needless to say that such institutions as the above are an injury to the public and not a whit better morally than the "sawdust-swindlers."

If they are found to be increasing, it will be the duty of those concerned in public welfare to expose and denounce them.

THE INTERNATIONAL CONGRESS.

The Committee on Organization of the International Medical Congress held its special meeting in this city last week. The meetings were held in secret, and secretiveness seemed to have been the essential feature of the proceedings. Doubtless the gentlemen thought they were

acting very wisely; but they need hardly have taken so much trouble. When members, supposed to represent the interests of the profession, meet at a critical time, with mystic rites, refusing all information except to members of their own clique, they at once simply overreach themselves.

There is but one inference as to last week's work. The Committee has done a foolish thing, and it prefers to cloak its folly until it can be set forth as wisdom in the gilded rhetoric of the chosen organ.

The Committee, we have every reason to believe, made no concessions which can be accepted as such. They filled the one hundred and twenty odd vacancies with gentlemen sufficiently unknown to fame to have escaped nomination by them before, and presumably sufficiently poor in spirit to accept belated honors.

THE NEW DIVISIONS OF APHASIA.

PROBABLY most of our readers were taught and still remember that aphasia is divided into two types—the amnesic, in which there is loss of memory of words; and the ataxic, in which there is loss of power of co-ordinating the articular movements. The significance of aphasia, its pathological anatomy, and the two divisions of it above referred to, were first made out by Bouillaud, Trousseau, and Broca. For many years the teachings of these men and their pupils were accepted, and became part of medical pathology. The French school appeared to revere the utterances of their older leaders too much to investigate further. It fell to the Germans, therefore, to find new phases of this peculiar disorder. Marcé, Kussmaul, and Wernicke, called attention to the fact that in some cases patients could speak or write perfectly well but could not understand spoken, or, perhaps, written words. There were, in other words, defects in the receptive part of the language faculty. They called these defects sensory aphasia, and divided this into the two forms of "psychical deafness" or "psychical blindness" according as the patient was unable to understand spoken or unable to read written language.

The French school at first viewed with doubt and distrust these contributions to a subject which seemed to belong especially to themselves. Some four or five years ago, however, Charcot met a typical case of sensory aphasia in his wards at La Salpêtrière. He at once began to study the subject with his accustomed energy and penetration. His labors, together with those of his pupils, have added greatly to our knowledge of aphasia, and Gallic prestige has been quite restored. If the French observers have not yet mastered the subject, they have at least got sufficient data to formulate a clear and definite doctrine of aphasia. According to this school, aphasia is to be divided into two grand types: the motor and the sensory, or as Charcot prefers to call them, aphasia of transmission and aphasia of reception.

Motor aphasia is of two kinds, aphemia or loss of the memory of the co-ordinated movements necessary to speech, and agraphia or loss of the co-ordinated movements of writing. Aphemia is caused by a lesion of the foot of the third left frontal convolution. The lesion in agraphia is very probably at the foot of the second left frontal convolution.

The sensory aphasias are similarly divided into psychical- or word-blindness, and psychical- or word-deafness.

The patient in the first instance can talk and understand what is said to him, but cannot understand or read written language. It is all Greek to him, though it may be his native tongue. He sees the signs, but cannot interpret them. The lesion here is in the left inferior parietal lobule, and the aphasia is accompanied by hemianopsia.

In psychical deafness the patient can talk and read, but does not understand spoken language. The lesion here is in the first left temporo-sphenoidal convolution.

The sensory aphasias, more especially psychical deafness, corresponds measurably with the older amnesic aphasia, while aphemia corresponds to some extent with ataxic aphasia. It is just as well, however, to drop for the present the terms amnesic and ataxic, and use the newer terms, motor and sensory.

It will be seen that a careful study of speech disorders may reveal a good deal with regard to the seat of the lesion. First of all, if there is aphasia, the lesion in a right-handed man is on the left side. Then, according as the particular form predominates, the seat of the disease may be inferred.

It must not be supposed, however, that all cases of aphasia can be sharply classified and assigned to one type or the other. Very often the symptoms are mixed, or change with the progress of the disease.

Again, the classification which we have given is by no means complete or final. A careful study of cases and of the mechanism of language enables the enthusiastic scientist to multiply the forms of aphasia almost indefinitely, so that Lichtheim, for example, gives us seven or more varieties.

These subdivisions, however, have only a theoretical interest.

The classification and forms which we have given, should be known, because a knowledge of them will be helpful in diagnosis.

OHIO PHYSICIANS AND THE INTERNATIONAL MEDICAL CONGRESS.—The President of the Ohio State Medical Society, Dr. William Morrow Beach, called a meeting of the physicians of the State "to take counsel respecting the situation, and offer suggestions or give instructions to the State representative." In response to the call some twenty or more physicians met in secret session at Columbus, on August 27th. What these gentlemen decided to advise their representative we do not know, nor does it matter, since neither technically nor morally had they the slightest right to instruct their State representative on the Executive Committee.

THE NEW YORK POLYCLINIC.—The Winter Session of the New York Polyclinic for 1885–86 opens on Monday, September 21st next. For the year which closes on that date, 235 physicians have attended the clinics of this school, making a total attendance for the first three years of the Polyclinic of 578. No changes will be made in the methods of teaching which have made this institution so attractive to practitioners.

News of the Week.

THE CONTROVERSY ABOUT CODES, AND THE INTERNATIONAL MEDICAL CONGRESS.—Dr. H. D. Noyes, of this city, has kindly sent us the following letter to Professor Hansen-Grut, of Copenhagen, and the reply thereto by that gentleman:

"The enclosed letter came a few days ago in reply to certain questions which I had asked. Professor Hansen-Grut was president of the Section of Ophthalmology in the Congress at Copenhagen, he resides and has a clinic in that city; he is a well-known man. He took an active part in the preparations for the Congress, in its conduct, and in getting out the Transactions. His statements as to the rules which governed its composition are authoritative.

"He is perfectly familiar with all that was said and done, and intended and understood, when the invitation to hold the next Congress in Washington was accepted. The views he expresses are those which were in the minds of the European members, and especially in the minds of the responsible executive officers of the Copenhagen Congress, when the next place of meeting was decided upon.

"I put the question to him in my letter of inquiry, about the admissibility of homœopathists, to more than cover the ground of dispute among us about the Code of Ethics. His statements completely put all those questions at rest, and demonstrate that there is absolutely no reason for any ethical distinctions, and moreover, that no body of men or any organizing committee have the right to impose any such qualifications upon members, nor in the choice of officers. With this letter, this element of discord in the organization of the Congress of 1887 should go out of existence.

"Professor Hansen-Grut was in this country in 1876, as a member of the International Ophthalmological Congress in New York. His remark about not expecting to find such exclusiveness in our country, is a most natural expression which will rise to the lips of every intelligent foreigner, and conveys to us an unintended rebuke which may well make us wince. The italics in the letter are by the author. Professor Lange, of whom he speaks, was Secretary General."

"HUMMELLAFT, DENMARK, August 21, 1885.

MY DEAR DR. NOYES:

"I am sorry you have so much bother about the Congress. The spirit that is at the bottom of the dispute is to me a proof of such exclusiveness as I would not have expected to find in your country.

"I will answer to question

"(1) That the controversy about Codes was never thought of, as we have nothing resembling your Codes of Ethics.

"(2) The invitation was decidedly given for the *whole* medical profession, none of us thought of or even mentioned the American Medical Association.

"(3) The *only* qualification required was that the member be a *legally acknowledged* medical practitioner in his country. *Our* homœopathists, who were legally acknowledged practitioners (Drs. Siemsen, Ferich, and others), were actually members, and undisputed members of our Congress.

"I have sent your letter to Professor Lange, who will no doubt corroborate my statements. To my knowledge he has already had similar questions addressed to him from America, and answered them in the same way as I have now done.

"The way across is long, the fear of the sea is strong. I do therefore firmly believe that it is injurious to the interests of the Congress to have too many restrictions put for admittance. Yours sincerely,

"EDWARD HANSEN-GRUT."

THE CHOLERA IN SPAIN, FRANCE, AND ITALY.—Up to August 28th the total number of deaths from cholera in Spain had reached 81,489. The number of cases at date of writing is over a quarter of a million. In those provinces of Spain which were first affected, the plague is diminishing, but in other parts of the country it is still spreading. On September 1st the number of cases reported was 3,669, with 1,120 deaths. This shows a diminution in the mortality-rate, which has a favorable significance. The returns for the whole of Spain show that there has been, during the past week, a slight diminution in the number of cases and in the mortality-rate. Cholera has appeared at several different places in Italy during the past week, viz., in the provinces of Alessandra and Genoa. Between twenty and forty new cases of cholera occur daily at Toulon and at Marseilles. The number does not seem to be on the increase. With such an immense hold as the cholera has got upon Europe, it seems almost impossible that it should not reach this country before its epidemic career is ended.

SUICIDE OF A PHYSICIAN.—A young Doctor, named Curry, living at Red Bank, N. J., committed suicide on September 1st, by shooting himself. The immediate cause was a love affair. Dr. Curry graduated in medicine at Philadelphia.

THE PHILADELPHIA VETERINARY SCHOOL AND HOSPITAL.—The new buildings of the Veterinary Department of the Pennsylvania University were opened on September 1st. It stands on a large tract of land given by the City Council to the new department. It has a frontage of over two hundred and fifty feet, and is built of stone and brick. There is stabling for forty horses, and accommodations for other animals. The "crazy" stall is circular and padded for delirious horses. The students' quarters include a commodious amphitheatre and museum, anatomical room, sixty-six by twenty feet, lighted both sides; histological laboratory, forty by twenty feet; pharmaceutical laboratory, and four private laboratories.

THE UNITED STATES HAY FEVER ASSOCIATION held its annual meeting at Bethlehem, N. H., beginning September 1st.

BIBLIOGRAPHY FOR "PHYSIOLOGISCHE OPTIK."—Dr. Arthur Koenig, of No. 16 Neue Wilhelm Strasse, Berlin, who is editing the bibliographical department of this work, asks for such notices from his colleagues as may assist him in presenting an exhaustive statement.

DRUGGISTS IN CONVENTION.—During the past week the National Retail Druggists' Association, the Pennsylvania State Board of Pharmacy, and the American Pharmaceutical Association held their annual meetings at Pittsburgh, Pa.

THE MEDICAL SOCIETY OF VIRGINIA.—The Sixteenth Annual Session of the Medical Society of Virginia will be held at Alleghany Springs, Montgomery County, Va., commencing Tuesday night, September 15, 1885.

MICROSCOPIC RELICS OF GENERAL GRANT.—Dr. George R. Elliott, the microscopical expert in General Grant's case, has had the specimens upon which the diagnosis of "epithelial cancer" was based, carefully prepared for permanent keeping in his office. There are eighteen of these slides, which are placed in a mahogany cabinet, upon which are two silver plates, engraved as follows: "General U. S. Grant cabinet of microscopical slides, reported upon as epithelioma, February 20, 1885, by Dr. George R. Elliott. Consulting staff: Dr. Fordyce Barker, Dr. J. H. Douglas, Dr. Henry B. Sands, Dr. Geo. F. Shrady. This cabinet is placed in a larger one made of cocobolo wood, upon which stands a bronze bust of the General.

THE SMALL-POX IN CANADA.—The epidemic of small-pox in Montreal has finally become a serious matter. On September 7th the Provincial Board of Health held its first meeting to take action in the matter. A public meeting of citizens was also held on the same evening, when resolutions were passed calling upon the authorities to erect a new small-pox hospital at once. Dr. Covernton, of the Ontario Provincial Board of Health, submitted a proclamation, issued by the Ontario Government, prohibiting rags, dry goods, and other merchandise from entering that Province, unless accompanied by a certificate to the effect that they are free from contagion. Four medical men have also been appointed to travel between Montreal and the borders of the Province to examine passengers, and if they have not certificates of vaccination, to vaccinate them at once, if thought necessary, or within fifteen days. These officers have also power to question passengers minutely as to districts from which they come, and if not satisfied with the replies can send them back to the place they came from.

WILL THE CONGRESS MEET IN AMERICA?—It would be idle to attempt concealment of the fact that not only is the success of the proposed meeting of the International Medical Congress at Washington imperilled by existing dissensions in the profession of America, but that it is a serious question whether the gathering can be permitted to be held there at all. We are alive to the possibility that the curious arrangements entered into by the clique of the American Medical Association may be fully carried out; but at the same time we are perfectly certain that a congress convened under such circumstances will not be international in any sense of the word, but will develop into nothing more imposing than a magnified mutual admiration society. There is no longer any doubt that all the leading members of the profession in America will at such a gathering be conspicuous by absence, or that European practitioners will fail to find any recompense for this fact in receiving attentions from gentlemen whose names they are unable to associate with the extension or perfection of scientific knowledge or the advancement of the art of medicine. . . . The whole history of the International Congress has nothing so unfortunate as this episode to show, and we are deeply grieved that a great country like America, a country that is closely united to us by the holiest ties of blood and community of thought, should be the first to stir the deep waters of science by the introduction of a miserable and unworthy quarrel about—*ethics*, forsooth! In truth it is a mean and miserable bone that is the cause of contention. What is it to the sacred light of science whether its followers are members of this, that, or the other Association? and who outside the arena of local politics will care a straw for the ethical opinions of men with whom he is associated in common pursuit of a great and honorable profession? We want to meet the doctors of all nations at an international congress; and so that they be doctors and honest men, what other right or title to be present need they have? Possibly, nay, even probably, such catholic invitations as the Congress naturally extends may give admission to a few whose claims to be regarded as doctors *and* honest might be open to criticism.—*Medical Press and Circular.*

DR. FERRÁN IN SPAIN.—The cholera continues slowly to abate. It has already attacked about 200,000 persons, of whom about one-third have died. Dr. Ferrán continues to inoculate at $3 a syringeful. Those who can prove themselves poor he inoculates gratis. He urges the necessity of a second "massive" inoculation on the tenth day. Total, $6.

THE AMERICAN ACADEMY OF MEDICINE.—The next meeting of the Academy will be held at New York, on October 28th and 29th.

DR. P. O. HOOPER, of Little Rock, Ark., a general practitioner of long experience, has been appointed to succeed Dr. C. C. Forbes as Superintendent of the State Insane Asylum, of Arkansas.

PREVENTIVE INOCULATION OF YELLOW FEVER.—In a letter of Dr. Freire, of Rio de Janeiro, to Dr. Ramirez, published in *La Crónica Médica*, of Lima, the writer states that he has vaccinated over three hundred individuals with gelatine cultures of the yellow-fever microbe. The inoculations are made by means of five or six punctures in the arm. As a general rule, a few hours after the operation the subjects experience a slight headache, with bruised feelings in the extremities and lumbar region, and rachialgia. There is an elevation of temperature of 1° or 2° F., and in rare cases there was nausea or vomiting. These symptoms continue for two or three days, but never become dangerous in their severity. The inoculations were practised upon persons living in the very heart of the infected districts, and not one of the subjects died, and only very few suffered from a mild form of the disease, although of their non-vaccinated neighbors two hundred died within a period of three months.

THE CONGRESS OF THE FRENCH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE held its annual session at Grenoble, beginning August 12th. M. Verneuil presided, and pronounced a discourse upon "The Surgery of 1885." It was a keen and witty criticism on the prevalent mania for operating—the *prurigo secandi*. In the seventeenth century there was a rage for transfusion; in the eighteenth, every man who fell on his head was trepanned; later, during the wars, every injured limb

was amputated. When Verneuil began his career tenotomy was all the rage; a little later there was a *réséco* mania; now, when one specialist operates, all operate. A prevalent mania at present in France is the application of the cautery. The world, says Verneuil, has been too much transfused, too much trepanned, too much tenotomized, resected, amputated, and far too much *travaillé dans le petit vassin de la femme.* In the medical section, presided over by M. Henrot, M. Landowsky reported cases of epithelioma cured (?) by applications of the juice of *Euphorphia leterodexa.* M. Chauveau made a report upon preventive inoculations for cholera, in which he claimed that the possibility of the efficacy of such inoculations could not be negatived on scientific grounds. M. Lepine read a paper on nephritis. M. A. Voisin reported success in the treatment of mania by hypnotism. M. Paul recommended warm sublimate injections in the treatment of gonorrhœa.

Cholera and the Importation of Rags.—A report from the United States Minister at The Hague states "that in view of the existence of cholera in Spain, the Government of the Netherlands has prohibited the importation of rags, old clothing, linen, and unwashed bedding after June 24th. The law applies also to the transportation of such goods through the country, but does not apply to the baggage of travellers." A very great diversity of opinion exists among sanitary authorities relative to the danger to be apprehended from the importation of rags from cholera-infected ports. A paper was read at the Sanitary Congress in Holland last year, wherein the author claimed that there were instances on record where epidemics of cholera could be traced to the introduction of rags. Many other authorities, on the contrary, deny the persistence of the contagion of cholera for any considerable period in rags, and insist that they should be admitted without restriction. All agree, however, that precautions are necessary to prevent the spread of cholera, and there is a widespread feeling among the people in all countries that the indescribable filth often found in old rags which are from time to time received in all countries from cholera-infected districts are liable to be the bearers of the disease. The English authorities, many of them, are either very skeptical on the subject or openly opposed to taking any action in this matter, though in response to the prevailing feeling, the importation of rags, etc., into England from Spanish ports, except on certain conditions, was interdicted for several months. In April last, however, the embargo was raised, and the whole matter relegated to the local authorities at the several ports. It is worthy of note that the English representatives appointed on the committee on disinfection and disinfectants, by the Cholera Congress recently held in Rome, all of whom have become experts in the treatment of cholera during a residence in India, are said to have abandoned the theory of the infectious or contagious character of the disease, except as it is wafted from place to place in the air. In our own country the action of the Treasury Department in dealing with the subject has been uncertain and vacillating. At one time an order is issued prohibiting absolutely the importation of rags from infected or suspected ports; then the order is modified so as to admit rags that have been disinfected in one of three or four ways; and finally all orders are revoked, and, following the example of the British health authorities, the control of the introduction of rags is turned over to local health officers. The feeble and vacillating course of our Government is in strange contrast with the decisive policy of foreign nationalities. This is the more remarkable in view of the fact that we have a National Board of Health capable of advising the Treasury Department as to the questions relating to the public health involved in the importation of rags. As far as we can learn, that Board has never been consulted previously to the issue of any of these various and often contradictory orders. In any event, the action of the Government in the matter of the importation of rags has been unworthy of an enlightened country, whose commerce extends to the remotest parts of the globe. It was to enable it to adopt a wise policy on all questions affecting the public health of the United States that Congress organized the National Board of Health. But the purpose of Congress has been largely thwarted by officials connected with the Treasury, who aspire to usurp the functions of the Board, and to expend the public funds properly belonging to that body. It is for this reason that our Government now occupies a position inferior to that of any European government in all its acts designed to protect and promote the public health. Its policy is dictated by those who are not only ignorant of the principles of public hygiene, but whose motives are transparently selfish.

Canada Medical Association.—The Eighteenth Annual Meeting of this Association was held at Chatham, Ontario, on Wednesday and Thursday, September 2 and 3, 1885. Hon. Michael Sullivan, M.D., the President, occupied the chair. The attendance was large and thoroughly representative in character. A goodly number of American physicians were present, and were heartily welcomed to all the privileges of the meeting.

The President, in retiring from the chair, congratulated the Association on the excellent arrangements which had been made for the meeting, and the programme which had been provided. He referred in the highest terms of commendation to the part taken by the members of the medical profession during the recent rebellion in the Northwest. He had had every opportunity of judging in the matter, and was highly pleased with the admirable manner in which the sick and wounded had been cared for. The different ambulance corps which had been formed were most useful, and had assisted most materially in the campaign. The surgeons had performed their work in a most excellent manner, though very often they were met with most discouraging circumstances, and were compelled to do their work in places not at all adapted for surgery. He concluded his address with a high compliment to the President-elect, whose scientific attainments had given him a world-wide fame.

Dr. William Osler, Professor of Clinical Medicine in the University of Pennsylvania, Philadelphia, formerly Registrar of McGill College, Montreal, was then introduced as the President-elect, and delivered the annual address. It was an eloquent and highly interesting sketch of the history and progress of medical education in Canada.

The Secretary read a communication from Dr. Brodie, President of the American Medical Association, expressing regret at his inability to be present at the meeting,

and assured the Association that the arrangements for the coming meeting of the International Medical Congress were most complete, and that, notwithstanding the opposition met with, the meeting would be a great success. The wish was also expressed that the members of the medical profession in Canada would unite in promoting the success of the Congress.

The Association was then divided into sections.

In the Medical Section, Dr. Harrison, of Selkirk, Ont., was elected chairman, and briefly addressed the meeting. Dr. Grant, of Ottawa, read a highly interesting account of a case of aortic aneurism, illustrated with an exhibition of the specimen. The case had been under his care for over four years before death. The only treatment adopted had been complete rest and the occasional administration of large doses of potassium iodide. The exhibition of the pathological specimen was most interesting. Dr. Worthington, of Clinton, read a paper on cerebro-spinal meningitis, and Dr. Arnott, of London, presented a contribution on "The Sources of Malaria." Dr. Holmes, of Chatham, read a paper on "Observations on Puerperal Mania," and cited several cases in which it seemed that laceration of the cervix uteri was the source of the trouble. In these cases, as soon as the laceration was repaired recovery began. This paper was received with great interest, and the cases related by Dr. Holmes were certainly carefully reported.

In the Surgical Section, Dr. Edwards, of London, was elected chairman, and after a few appropriate remarks introduced Dr. J. H. Carstens, of Detroit, who read a paper giving an account of a successful case of fibroid removed by laparotomy. Dr. Fulton, of Toronto, presented a paper on "Subperiosteal Amputation," and Dr. Shepherd, of Montreal, read a paper on "Excision of the Tongue, with Preliminary Ligature of the Linguals." The cases cited by Dr. Shepherd, as well as his method of operating, were most interesting, and excited considerable discussion, in which Dr. McGraw, of Detroit; Dr. Grant, of Ottawa; Professor McLean, of Ann Arbor, and others took part. Dr. Gardner, of Montreal, presented an interesting case of double uterus, the history of which was full of interest. The specimen was exhibited and excited considerable curiosity.

The members of the medical profession in Chatham tendered to the members of the Association and their guests a splendid banquet in the Garner House on Wednesday evening. The chair was occupied by Dr. Holmes, of Chatham, who presided in a most acceptable manner. The after-dinner addresses were most eloquent, and those delivered by the American visitors produced an impression which will be remembered with pleasure. The responses to the different toasts brought out the fullest expression of the good feeling that exists between the profession in Canada and the United States.

The first order of business on Thursday morning was the election of officers for next year. The recommendations of the Nominating Committee were unanimously adopted, and were as follows: President, Dr. Holmes, Chatham; Vice-Presidents—for Ontario, Dr. Sloan, Blyth; for Quebec, Dr. Colin Sewell, Quebec; for New Brunswick, Dr. Earl, St. Johns; for Nova Scotia, Dr. Wickwin, Halifax; for Manitoba, Dr. Butt, Winnipeg; General Secretary, Dr. J. Stewart, Montreal; Treasurer, Dr. Sheard, Toronto; Local Secretaries—for Ontario, Dr. Wishart, London; for Quebec, Dr. Bell, Montreal; for New Brunswick, Dr. Lunan, Campbelltown; for Nova Scotia, Dr. Almon, Halifax; for Manitoba, Dr. Good, Winnipeg. Quebec was chosen as the next place of meeting.

In the Medical Section, Dr. Graham, of Toronto, presented a pathological specimen from a case of dissecting aneurism of the thoracic and abdominal aorta. The specimen was carefully examined. Dr. Wilkins, of Montreal, read a paper of a highly interesting character, and made an exhibition of specimens—microscopical and macroscopical—illustrating the infectious character of tuberculosis. Dr. Stewart, of Montreal, presented a paper on the curability of the chronic form of infantile paralysis (polio-myelitis anterior chronica), which was most interesting. Galvanism was the only treatment pursued, and the internal use of medicine was not recommended. Considerable discusssion followed the reading of this excellent paper. Dr. McKeough, of Chatham, presented in very concise form the notes of several cases of puerperal eclampsia, in which he had used pilocarpine. The conclusions arrived at were, that under certain circumstances, the use of pilocarpine was most beneficial, but that it was a remedy which experience proved should be employed with great caution. Dr. Bethune, of Wingham, exhibited an interesting specimen, showing a parasite removed from an abscess in the thigh. Dr. Whiteman, of Shakespeare, Ont., read a paper on "Pelvic Peritonitis and Pelvic Abscess."

In the Surgical Section, Dr. J. Campbell, of Seaforth, who was unable to be present, forwarded a paper on "Trephining of the Mastoid." It was a report of a case in practice where a young boy had disease of the mastoid cells, accompanied by the usual symptoms, the attacks each time becoming more severe than the preceding one. The doctor trephined, using a gouge guarded by the finger in the operation. He dusted the wound in both bone and flesh with iodoform, and put in a leaden tube and left it three days, after which he syringed with carbolic lotion 1 to 40. The case was entirely successful; the boy's health and hearing improved, and the perforation in the drum-membrane healed up. The principal points made by the doctor were the following: 1. The operation should be performed early. 2. The gouge, used with a rotary motion and protected by the finger, is the safest and best instrument for perforating the bone. 3. The usual linear incision should be made exactly at the union of the cartilage of the ear with the scalp, commencing on a level with the upper wall of the meatus, and the bone perforated immediately beneath this. 4. The mastoid cells should be opened freely into, and numbers of them broken up. 5. With the foregoing precautions the operation was both safe and successful. 6. The operation advised by Dr. Sexton, of New York, should never be performed. Dr. Atherton, of Toronto, read the notes of two successful cases of laparotomy performed for the removal of uterine myoma. An interesting discussion followed. Dr. Rutherford, of Chatham, presented an interesting paper on "Suprapubic Urination." A number of papers were of necessity read by titles.

The Association adjourned on Thursday afternoon. The attendance at the different meetings was large, and the great success of the gathering was most gratifying.

Reports of Societies.

British Medical Association.

FIFTY-THIRD ANNUAL MEETING.

Held at Cardiff, on Tuesday, Wednesday, Thursday, and Friday, July 28, 29, 30, and 31, 1885.

REPORTS OF SECTIONS.

SECTION OF MEDICINE.

(Continued from page 273.)

FRIDAY, JULY 31ST—THIRD DAY

THE PRESIDENT took the Chair at 11 A.M., and the Section sat until 2 P.M.

DR. W. P. BIDEN read a paper on "The Climate of Hyères," a pleasant little town, and the one on the Mediterranean most easily reached, as it is not far from Toulon. The air is dry, bracing, exhilarating. There is plenty of sunshine. Orange trees are abundant, so are olives. For the last twenty years the place has been growing in importance as a winter health resort for persons in delicate health.

DR. F. W. PAVY, read a long and rather tedious paper on "Cyclic Albuminuria," by which he appeared to mean what is often termed intermittent albuminuria. It may occur in the apparently healthy, is, in fact, only temporary, but he wished to show that it observed definite periods—would be present, for instance, in the afternoon but not in the morning. This was important as to life assurance. A case was named, which the examiner of the office rejected as albuminuric, but who was subsequently passed by going for examination at the time of day when no albumen could be detected. A number of cases were read and details given, which excited some impatience, and one member said to his neighbor in your reporter's hearing, that a man who took up more than an hour the day before ought not to take an hour again.

THE PRESIDENT thought it very important to settle whether temporary albuminuria should be a cause of rejection for life assurance. He had often been himself called upon to decide this question, and it was to be observed that there was no time to watch the case and let events decide the import of the phenomenon. The office wanted an opinion—shall this life be taken?—and wanted it the same day. He asked Dr. Pavy a question as to the significance he attached to this albumen.

DR. PAVY replied to this simple question by relating another case, which he said had been also seen by Dr. Fothergill, who was present and could state his view.

THE PRESIDENT having asked Dr. Fothergill if he would like to remark upon the matter,

DR. FOTHERGILL said emphatically that he was very glad to observe that Dr. Pavy displayed an inclination to join those who rejected the prevailing notions. For his part he welcomed the help of anyone who would assist to lay the axe to the root of the tree of that demoralizing superstition that albumen was essentially a kidney disease.

DR. BARR, of Liverpool, thought that we should look to the circulation as much as to the kidney, or more. The propelling power of the blood must drive it through the glomeruli, and any failure to do this might result in the transudation of albumen. This mechanical transudation surely had more to do with the heart than the kidney. As to the danger of temporary albuminuria, he mentioned the case of a gentleman who had passed considerable quantities for some eighteen months, but recovered, and now, years after, was in excellent health.

DR. J. D. DAVIES, from Australia, having been asked by the President if these cases were common in the colonies, said that they were very frequent, and added, that he examined many for life assurance, and had hitherto felt obliged to reject them. He would be glad if this point were further cleared up, for what otherwise could he do than continue to reject them?

A MEMBER, whose name the President did not announce (in fact few names were distinctly announced—a very inconvenient thing for reporters, however it may seem indifferent to acquaintances of speakers) said he had observed that salts were always present at the same time, often phosphates. These were common in solicitors and others, whose work was mental and who took too little exercise. Some mechanical workers would get urates when overdone. Rest would clear off phosphates, urates, or oxalates, and the albumen with them.

DR. BULKLEY, of New York, could corroborate Dr. Fothergill from his personal experience. In 1868 he had himself had a severe attack of albuminuria. Casts were present in his urine in great variety and it became quite solid on the usual tests. He took a holiday and this passed away. He returned to hospital work and in a month had another attack. He rested again and got better. On returning to work the albumen again appeared. He went to Europe and recovered. He found in different parts of the day it occurred for some time, but he was now in perfect health and protested against the notion that albuminuria is not recovered from.

DR. TYSON said he could add a similar personal experience, for years ago he consulted the President as to albuminuria, which had attacked him after scarlet fever. He had fairly recovered, but still felt a degree of susceptibility. For example, exposure to a draught would always give him a pain in the left loin. The same pain would come on if he ate much meat. He believed his left kidney had been affected but was now well, though rather weak. He had come to the conclusion that with care he could do his work very well, and he was determined, above all things, not to have his urine examined again, for he did not believe it now contained albumen. [Laughter and applause.]

DR. GRIFFITH, of Swansea, said he thought the kidney was very much like other organs. One has one disease, and another has another. He attributed albuminuria to derangement of the vaso-motor centre. But if a certain quantity of albumen was persistently present in the urine he thought there was certainly something wrong with the kidney.

THE PRESIDENT, DR. WILKS, said he regarded Dr. Bulkley's and Dr. Tyson's cases as instances of real recovery from a definite disease.

A MEMBER, whose name was neglected to be given, said that five years ago he had pain in the region of the kidneys which laid him up for three weeks. It was so severe he feared it might arise from grit, though he also thought of gout. He completely recovered, and has experienced no difficulty about his food, but if he drinks a glass of beer or any stimulant he at once gets albumen in his urine.

DR. PAVY replied, commenting on several of the statements made, but said nothing he had not previouly stated, save that he had not found anything special about phosphates or other salts.

The discussion was now closed, and the papers proceeded with.

DR. J. F. PAYNE, read a paper on

ALBUMINURIA COMING ON IN THE COURSE OF SECONDARY SYPHILIS,

full of matter carefully arranged, and to which justice cannot be done in a short report.

DR. COUPLAND read a paper on

PULMONARY GANGRENE,

and DR. T. D. GRIFFITHS another on

THE CAUSES OF THE LOCALIZATION OF TUBERCLE IN THE APEX OF THE LEFT LUNG.

Some remarks were made and questions asked in reference to points treated in these two papers, but there was no definite discussion, and the President called on

Dr. Prosser James to read his promised paper on "Pancreatic Digestion." This opened by an account of the physical and chemical characteristics of pancreatic juice when fresh from a recent fistula as contrasted with the secretion of a later period. This was followed by an account of the several ferments found in the juice, and the attempts made to isolate them, and this again by reference to the so-called pancreatines. The author produced some sensation by the announcement that sometimes, through insufficient care or skill in preparation, the ferments were not merely destroyed, but that decomposition had been suffered to set in, and that he had known the changing products of decay to do duty for the pancreatic ferment. The idea was disgusting and the consequences probably injurious. Dr. James then gave the results of his own experiments, and announced that he had succeeded in separating all the ferments in combination with an inorganic, and, therefore, stable compound. This was no other than chloride of sodium, which he had some time ago combined with pepsine. He replied to some *à priori* objections to the use of salt for this purpose, and said he hoped shortly his pancreatic salt might be made on a larger scale, and prove as useful as his "peptic salt" had done. He had placed specimens of these, as well as the products of other experiments of his, in the annual museum, where members could examine them for themselves. The remainder of this paper was occupied with the process of secretion of pancreatic juice, and the question whether there are any therapeutical means for influencing it, but the author read this so rapidly, no doubt because time pressed, and omitted some paragraphs, that it was difficult to follow.

The President remarked that the paper hardly invited discussion, unless any one had come prepared for the purpose, and would have to be read carefully in the *Journal*.

Dr. A. T. Harrison read a paper on the "Treatment of Tinea Tonsurans."

Dr. Milner Fothergill submitted to the Section, in his striking and agreeable style, the semi-paradoxical question

WHEN A PATIENT DIES OF EXHAUSTION, OF WHAT DOES HE DIE?

This might be supposed likely to produce an amusing discussion, but time was wanting. A general meeting was to immediately follow the sitting of the Section, to which some were bound to go. Lord Windsor's garden party would soon begin, yet the Section was in earnest and proceeded with the work. The following papers were either read, or their conclusions stated by the authors, or in some cases taken as read: Mr. G. Padley, "Case of Empyema Successfully Treated by Operation"; Dr. Shingleton Smith on "Intra-pulmonary Injections"; Dr. Tatham, "Registration of Chest Diseases as Carried on at Brompton Hospital"; Dr. Myrtle, "Syphilitic Eruptions and their Treatment by Mercury and Harrogate Waters"; Dr. Drummond on "Malarious Melanæmia and on the Influence of Geographical Position on Fever"; Dr. Haddon on "The Tropical Sea as a Health Resort in Pulmonary and Renal Diseases"; Dr. Harper on "Extraordinary Cornea in a Child" and "Abnormal Shape of Skull."

Some other papers announced in the programme of previous days, but not mentioned in the foregoing report, were taken as read, and will appear in the *Journal*.

The President then closed the Section of Medicine.

Making Business for the Alienists.—An Australian journal thus announces a forthcoming serial novel: "Of 10,000 readers of this fatal romance it is estimated that there were 422 cases of insanity, 977 of monomania, 894 suicides, and 1,315 cases of mysterious disappearance."

THE BERLIN SOCIETY OF INTERNAL MEDICINE.

Stated Meeting, June 1, 1885.

Herr Fraentzel in the Chair.

(Special Report for The Medical Record.)

Herr Remak presented a patient suffering from

DEGENERATIVE MUSCULAR ATROPHY.

The man, now thirty-five years of age, had had a hard chancre, twelve years before, followed shortly by an eruption of roseola. He had been married for eight years and was the father of two healthy children; his wife had had two still-births and one miscarriage. She had also been treated for syphilitic ulcerations. Six months ago the patient began to complain of pain in the neck and right shoulder, and of hoarseness in speaking. He had also had several exostoses, all but one of which had disappeared under treatment by iodide of potassium. Inspection showed considerable atrophy of the muscles of the neck and intrascapular space, of the trapezius, and of the muscles of both arms, especially the left. The diaphragm was also implicated, as evidenced by the epigastric sinking during a deep inspiration. Laryngoscopic examination revealed paralysis of the left recurrent nerve, and subsequently of the right also. The muscles of the palate and tongue were unaffected. Sensation was unimpaired, and the condition of the lower extremities and of the genito-urinary organs was normal. The author believed that there was an ascending lesion of the cervical enlargement leading to degeneration of the muscles which derive their innervation from that portion of the cord.

Herr P. Guttmann presented two specimens of

ANEURISM OF THE AORTA.

The first case was that of a man, fifty-six years of age, in whom there was flatness on percussion in the posterior and lateral portions of the left side of the chest. There were no signs pointing to a lesion of the heart or great vessels. Within twenty-four hours after coming under observation the patient had an attack of syncope, accompanied by a frightful hemorrhage from the mouth, and died immediately. The autopsy revealed an aneurism of the aorta, the size of a man's fist, at the level of the fourth dorsal vertebra. There was a communication with the œsophagus whence had come the hemorrhage that killed the patient. There was no atrophy of the left ventricle. The second case was one of aneurism of the arch of the aorta, which was readily diagnosed during life by the physical signs and by the evidences of pressure upon the neighboring structures. The autopsy showed the correctness of the diagnosis.

Herr Klaatsch then read an interesting paper on

RÖTHELN,

or German measles. After a historical review of the subject the speaker proceeded to describe the disease as he had observed it in two distinct epidemics. He found that a previous attack of measles or scarlatina afforded no immunity to rötheln. The symptoms were those of a benign affection of short duration. The eruption appeared first upon the upper portions of the body and extended thence downward; in some cases it covered the entire body, even the scalp and palms of the hands, in other cases it was limited to a smaller area. The skin was covered with spots of a bright red color, varying in size from mere points to patches one-fourth to one-half inch in diameter, equidistant from each other and separated by healthy integument, though sometimes the eruption was confluent. The eruptive period was from three to five days in duration. In about half the cases there was no fever; in the others the temperature averaged about 100° F. In some instances there was redness of the conjunctiva and pharynx, and the author occasionally observed a swelling of the cervical glands. The affection

was moderately contagious. The period of incubation was difficult to determine, but seemed to be usually from seventeen to twenty-eight days. It was not necessary to isolate patients with rötheln for a longer period than eight days.

The Society then adjourned.

Correspondence.

OUR LONDON LETTER.

(From our Special Correspondent.)

DOCTORS AND THEIR ANNUAL HOLIDAY—A REMINISCENCE OF SIR ASTLEY COOPER—THE RELIGIOUS QUESTION IN HOSPITALS—THE STATE OF THE THAMES—PURIFICATION OF THE SEWAGE—DIARRHŒA MORTALITY.

LONDON, August 17, 1885.

As most of the leaders in medicine and surgery are away taking their annual holiday, scientific medical work may be fairly said to be now carried on in London at the minimum rate for the year. The annual holiday has now become an institution for doctors as well as patients, and the present is the month chiefly favored by both. Some medical men contrive to combine business with pleasure, and select some continental health resort for an annual visit where they can take some of their patients with them. Few doctors are indifferent to fees, and they are usually as attractive to those who enjoy large practices as to those who vegetate on small ones. I fancy very few modern hospital surgeons in London would be tempted to imitate Sir Astley Cooper's behavior on one occasion. A distinguished orthopedist (still living and from whom I have the story) called on Sir Astley one morning by appointment at his request, to demonstrate to him a then new operation. More than an hour elapsed and Sir Astley was still busy with questions and remarks, being, says my informant, a man "always very keen after knowledge." The servant came several times to the door to remind him that numerous patients were waiting, but was put off time after time. Midday at last arrived and with it the surgeon's carriage to take him to his hospital. The footman again entered and announced the carriage. Sir Astley Cooper was rather taken aback for a moment, but recovering himself, said: "Bring the carriage round to the stable entrance and I will go out through the stable." This he did, leaving all his patients to go away without his having seen one of them. On leaving, he invited his friend to come again on the following day and renew the demonstration.

The religious question is again to the front in connection with hospital management. This time it is at University College Hospital where a scandal has arisen, owing to a dissenter having been refused admission to train for a nurse in that institution. The nursing in University College Hospital is conducted by a "sisterhood," who all belong to the Church of England and have pronounced tendencies toward the "High-church" party. The placing of the nursing in the hands of a "sisterhood" and giving them exclusive control has been tried at other hospitals, and in them also it has led to trouble. King's College Hospital was the scene of angry disputes some time back, and the more recent feuds at Guy's can scarcely be forgotten. The delegation of the nursing at University College Hospital to a sisterhood belonging to the ritualistic party is the more remarkable because University College (and subsequently the Hospital also) was founded mainly by the exertions of Nonconformists, and the necessary funds were largely contributed by them. The English universities were then closed to Dissenters, as also was Trinity College, Dublin. As a protest against this the present College in Gower Street was founded. Out of this sprang the present University of London. I am not speaking without book, as it were, for a near relative of my own took, in conjunction with the late Lord Brougham and others, a very active part in founding the College. As no expression of religious belief was exacted from its students it was called "The Godless College" by the students of its rival in the Strand—King's College. "The Godless College," however, prospered, and is still largely supported by Nonconformists. Some of its professors and some of the medical staff of the hospital at present are, I know, dissenters. I need not dwell further on the subject. I have said enough to show that, great as have been the advances within the last fifty years, we are still far from enjoying complete religious liberty. In this, as in some other things, America is ahead of England. The Hospital Sunday Fund threaten to withdraw their grant unless the exclusiveness to which I have referred is modified.

The usual autumnal scare about the state of the Thames is now on. Its condition is certainly not one of which we can be proud. Although the metropolitan sewage is discharged some miles down the river, yet the tidal efflux carries polluted water far up into the intrametropolitan portion of the stream. During the present summer large quanties of manganate of soda and sulphuric acid have been used as disinfectants and deodorants. These have been freely poured into the sewers, and also used at the outfalls. The cost per week has been over three thousand pounds. As yet only a million gallons daily have been treated at the outfalls, but preparations are being made for treating eight million gallons daily. It is proposed that a portion of the sewage shall be treated by precipitation or otherwise on one of the islands of the Thames before being allowed to pass into the stream. In spite, however, of the unsanitary state of our river, the returns of the Registrar-General show the present mortality from diarrhœa in London (during the past few weeks) is equal to an annual death-rate of less than four per thousand. This is less than at most provincial towns, and is very greatly exceeded by that of most foreign cities.

OUR PARIS LETTER.

(From our Special Correspondent.)

THE PROPERTIES OF TERPINOL—THE POSSIBILITY OF THE PASSAGE OF BACTERIA FROM MOTHER TO FŒTUS—SUBCUTANEOUS INOCULATION OF TYPHIC MICROBE—MORE CONCERNING CHOLERA INOCULATION.

PARIS, August 14, 1885.

ABOUT six months ago Dr. Dujardin-Beaumetz read a paper at the Société de Thérapeutique of Paris, on the properties of terpinol, a derivative of terpine, which latter is nothing else than the binhydrate of turpentine. Dr. Lépine, of Lyons, experimented with both these substances on hospital patients, and both these gentlemen came to the conclusion that the substances just named are most useful in bronchial catarrh. Professor Germain Sée has since experimented with terpine, and as his experience is not quite in accord with that of Dr. Lépine as to its physiological effects, he has thought proper to give the results of his own researches, which he laid before a recent meeting of the Academy of Sciences. The following is a summary of the learned professor's conclusions on the subject: 1. Terpine constitutes a powerful modifi cator of the mucous membrane of the air-passages, the excessive secretion from which it keeps under control. It diminishes and rapidly stops purulent expectoration in the catarrhal forms of phthisis, whether the muco-purulent secretion comes from the bronchial tubes irritated by tubercles or from the parietes of pulmonary cavities, whether the disease is at its commencement or at the stage of cavity-formations, terpine will be indicated whenever the formation of pus is sufficiently abundant to fatigue the patient, to reduce his strength, or to bring him to a state known by the term consumption. 2. It may be successfully employed in the hæmoptysis of commencing tuberculosis, that is to say, when the disease has not reached the development of large cavities with aneurisms of the pulmonary artery. 3. In the treatment of pul-

monary catarrhs, of chronic bronchitis independent of asthma, and the provoking of dyspnœa only by the blocking up of the bronchial tubes, terpine constitutes the best means by which the bronchial hypersecretion may be diminished. 4. Its prompt and certain action and being exempt from physiological inconveniences renders it preferable to the preparations of turpentine, of tar, or of other substances of that class which contain so little of terpine; the essence of turpentine is not tolerated by the stomach. Terpine even presents, owing to its perfect innocuousness and its perfect digestibility, advantages over creasote. 5. The best mode of administering this drug is in the form of pills or in an alcoholic solution, and the best dose is one gramme, or fifteen and a half grains per day. 6. In nervous emphysematous or catarrhal asthma, iodine and pyridine are incontestably superior.

A short time ago M. Koubassoff made a communication to the Paris Academy of Sciences through M. Pasteur giving an account of some experiments he had performed to illustrate the possibility of the passage of bacteria from mother to fœtus. He injected various cultivations of the bacillus of carbon under the skin of pregnant guinea-pigs. On examining the fœtus after the death of the mother it was found that the bacilli always passed from the mother to the fœtus, but that pathological conditions of the membranes of the placenta and fœtus prevented this passage. That inoculation of pregnant females with a too powerful vaccine nearly always caused the death of the fœtus; that inoculation after the mother had been protected by satisfactory vaccination nearly always killed the fœtus. From these facts M. Koubassoff concluded that the fœtus cannot be protected by maternal inoculation.

At a subsequent meeting a paper from the same author was read on the passage of the septic vibrion of the rouget and tubercular bacilli from the mother to the fœtus. He remarked that if the bacilli of the septic vibrion inoculated into the mother be found in the fœtus, one is induced to admit as very probable the passage of all microbes from the mother to the fœtus, and to suppose the existence, in the placenta, of direct communications between the vessels of the mother and of the fœtus. From these experiments M. Koubassoff concludes that the bacilli of the septic vibrion of the rouget and of tuberculosis also pass from the mother to the fœtus. The importance of this fact, if proved, cannot be overrated.

At the same meeting of the Academy of Sciences, M. Tayon read a note on the results of experiments performed on himself and on several persons who volunteered themselves for the purpose, which permitted him to affirm that the subcutaneous inoculation of the typhic microbe is not fatal in man; but whether this would confer immunity against typhoid fever is a question that he is not in a position to resolve, and must therefore leave it to others to do so.

In connection with preventive inoculations I may mention that M. Anglade forwarded a paper to the Academy of Sciences, signed by three physicians, giving an account of Dr. Ferrán's inoculations performed by him at Belfajo, and other documents have been promised by other Spanish physicians of the results obtained by them at the different localities at which similar inoculations were practised by them.

Dr. Paul Gibier, of Paris, and Dr. Van Ermengen, of Brussels, have just terminated a certain number of experiments which show that hypodermic injections of the cholera bacillus, even of a strong dose, do not prevent animals dying after they have been inoculated by the stomach. This must militate greatly against Dr. Ferrán's theory, who, however, is allowed to continue his inoculations on his own responsibility.

A delegation composed of MM. Peyron, Director-General of the Assistance Publique, and Michelin, President of the Municipal Council of Paris, accompanied by Drs. Desprès and Robinet, as well as by two or three other members of the Council, has proceeded to London to study the organization of the work-houses, fever hospitals, and other hospitals set apart for patients affected with contagious diseases.

ON THE REPORT OF THE COMMITTEE ON DISINFECTANTS OF THE AMERICAN PUBLIC HEALTH ASSOCIATION—A REPLY TO DR. STERNBERG.

To the Editor of The Medical Record.

SIR: I very much regret that the Chairman of the Committee on Disinfectants of the Public Health Association has thought it best to reply to the criticisms of Mr. McClintock and myself by certain personal remarks, that, even if true, would not have any bearing on, or affect in any way the truth of our statements. I think that every one will admit that this evidence of petty spite is unworthy of a scientific investigator, and if Dr. Sternberg thinks it a waste of printer's ink to discuss publicly the report of the committee, he should not use it to bring before the public personal details. However, since he has descended to a discussion of this character, he will find that I am by no means averse to it; except that I am sorry to take up valuable space with such matter, and would not be led into it except to defend myself from gross misstatements.

I desire to offer the following commentary on Dr. Sternberg's article, and I wish it distinctly understood that nothing is said by way of malice, but simply to correct the charges he has made.

As regards the report being a preliminary one, this fact was especially mentioned by us, and we stated that we considered the objectionable recommendations as simply evidence of hasty preparation. Besides, while lack of time would justify an incomplete report, it does not justify an erroneous one.

The criticisms were not made directly to Dr. Sternberg for several reasons. I did not see the report until it had been published both in the *Medical News* and in pamphlet form, and in this way given a wide circulation. The fact that my name had been associated with the work on which it was based seems to me to be sufficient reason for my interest in its correctness, rather than requiring my silence. Perhaps my principal reason for not communicating directly with Dr. Sternberg was that I felt convinced that any criticism made in this way would not reach the profession. I know that this statement requires explanation, which I can give only by citing a past experience.

Not very long since Dr. Sternberg published in the *American Journal of the Medical Sciences* some determinations of the germicidal value of certain agents, among which were zinc chloride and Squibb's liquor zinci chloridi. It was stated that two per cent. of the solid chloride was efficient, and that eight per cent. (this was by volume) of Squibb's solution failed, the same conditions being observed. Now this solution is warranted to contain fifty per cent. of zinc chloride, and has a specific gravity of about 1.5, so that this eight per cent. by volume was equal to twelve per cent. by weight, one-half of which was solid zinc chloride. Professor Roberts Bartholow, in a note in the *Medical News*, called Dr. Sternberg's attention to this great discrepancy in his results. Dr. Sternberg then obtained a second bottle of Squibb's solution, and asked me to make a determination of its germicidal value, which was found to agree pretty closely with his own. He then replied to Professor Bartholow, saying that he considered his methods sufficiently accurate to justify the belief that Squibb's solution was not of full strength. It will be seen that to harmonize his two results it would be necessary for this preparation to contain less than one-third of the amount of zinc chloride warranted by Dr. Squibb. Thinking this to be extremely improbable, I determined by analysis the amount of this salt present, and found it to be just fifty per

cent. I informed Dr. Sternberg of this, but I have waited in vain for him to publicly correct his error. Now I have not cited this to show that Dr. Sternberg made a mistake, for none of us are free from them, but to show why I adopted the method I did of correcting the errors in the report of the committee.

It is true that the disinfecting and antiseptic powder was withdrawn before the publication of our paper, but not until some time after it had left our hands. The note to which Dr. Sternberg refers stated not only that the powder was withdrawn, but that the solution containing potassium permanganate should be decolorized by the addition of a little chloride of lime or Labarraque's solution before use on clothing or walls. The following history of the article, by McClintock and myself, may throw some light on the appearance of this note. As the report of the committee was published in the *Medical News*, we thought it proper that, as it is customary, any criticisms should appear in the same journal. For this reason our paper was first sent to this journal. Not long afterward I happened to be in Philadelphia and called on the editor of the *News* in reference to the article. I found that it was in type ready to go to press, but was surprised to be told by the editor that he had changed his mind, and thought it best not to publish it. The reasons assigned for this were "that it would cast doubt on all the committee had done," and "that Dr. Sternberg's note had just appeared in the number of the journal issued that day." As to the first of these I assured him that, as stated in our article, we had no such intentions; and as to the second, I pointed out to him a dangerous error in the attempted correction, viz., that chloride of lime or Labarraque's solution would *not* decolorize the potassium permanganate in the solution, while it would precipitate the mercuric chloride, and in this way entirely destroy the value of the solution. I was at a loss to account for this rejection of our article after it had been put in type, and the sudden appearance of Dr. Sternberg's note, until later, when, in answer to a letter from me, the editor of the *News* admitted that he had informed the committee of the intended publication of the criticisms. Now, I cannot say that this caused Dr. Sternberg to write his note—of this every one is at liberty to have his own opinion. The action of the editor of the *Medical News* would also bear discussion, but this is not the proper place for it.

There is one other point connected with this note that deserves attention. If, as Dr. Sternberg claims in his latest, the permanganate solution does not stain clothing, and if, as he adds, "this possibility of staining was fully considered by the committee before the recommendation was made," what was his object in rushing out with a note saying that this color should be bleached out before use? This part of his note he does not refer to in his last paper. Questions of this nature are not decided by consideration, but by experiment, and every one interested can determine for himself whether or not the solution recommended will, under ordinary conditions, give a decided and indelible stain to white goods after two hours' immersion, as directed by the committee. The fact is, that rather than admit their error the committee seem inclined to add the color as first directed, and then to get it out in any way possible. If one will trouble to use impure water, as Dr. Sternberg suggests, this will probably remove the permanganate better than chloride of lime, and it also possesses the advantage of not precipitating the mercury.

I am not sorry that it becomes necessary for me to explain my connection with the work of the committee. The first of last December Dr. Sternberg asked me to join him in the work, to which I agreed, with the distinct understanding that I would only give what time I could spare from other experiments, and that whatever was published should be over both our names. The work was continued for about two months, when I gave it up of my own accord, at which Dr. Sternberg very kindly expressed his regrets. I did this simply because I preferred to publish my work independently, and not to have it thought that it was done under any one's advice or directions. My work on the hypochlorites was done at the expense of the committee, and to some extent by what is known as Sternberg's method; but it was taken up of my own accord, and carried out according to my own plans. My attention was first called to the value of this class of preparations by the commercial samples of Labarraque's solution I examined for the committee. Dr. Sternberg speaks of the use of his method as though he had a proprietary right in it. He might very well consider how much credit he gives to Koch and Pasteur for the constant use of methods devised by them. If better proof is needed to show that he considers his method of the cultivation of bacteria private property, it lies in the fact that during this work he required a "trusted assistant" to promise that if his services were asked for by a certain distinguished investigator he would not give them, as that gentleman was anxious to secure some one acquainted with his methods of work, and thus do work for which he (Dr. S.) ought to have the credit. We would suggest that this could be avoided by taking out a patent on his method, or at least he should never have published it.

The statement about my commercial work is so untrue as to require but little notice. More than a month after I had given up all work for the committee I was asked by a manufacturing firm to give some chemical advice about the manufacture of a disinfecting solution, and of course I complied with their request. The subject was not mentioned to me until March, while I gave up work for the committee in January. This statement can easily be verified by reference to the firm to whom the advice was given. From this it must be seen that the intimation that my services were dispensed with on account of my commercial work is absolutely false. I do not engage in investigations having secret "points." The prejudice of the committee against manufacturers did not cause them to refuse money from such as had been benefited by their report, and it was even intimated to me by one of them that a contribution from the firm that had asked my advice would be acceptable, since the report was in their favor. Had they received it, perhaps my commercial work would not have been so objectionable. I do not mean that this money was allowed to influence their report, but was simply used to carry on the investigation.

Dr. Sternberg seems to still insist on the point that mercuric chloride should be added to "whitewash" for disinfecting walls. It was not claimed by us that the yellow oxide of mercury formed would color the walls, for the lime is present in too great excess; but if he doubts that it is formed, he can easily consult some elementary text-book of chemistry.

Any one having read the report of the committee will see that there is no intimation that mercuric chloride should be dissolved before it is placed in vaults; and, in fact, this looks very much like an after-thought on the part of the chairman of the committee.

The committee claim, and Dr. Sternberg admits in his reply, that the *only* advantage of the hypochlorite solution is its rapid action. We merely called his attention to his former statement about the coagulating action of corrosive sublimate to show his inconsistency in stating that it was equally effective on longer action. We referred only to the use of these agents in the sick-room, but his former statement that mercuric chloride should not be used "when the germs to be destroyed are embedded in masses of albuminous material," seems to me to apply more especially to the material in vaults. It is not sufficient, as Dr. Sternberg argues, to use, under such circumstances simply an antiseptic, for many vaults or cesspools communicate, with underground watercourses, and by this means the germs present would be removed from the restraining influence of the antiseptic, and contaminate the water used for drinking purposes. That the

pump-water in some of our largest cities is in pretty direct communication with cess-pools is shown by analysis. Dr. Sternberg's experiment, in which the solution was stirred up with a little *semisolid* fæces in a beaker, can scarcely be held as applying to the masses in vaults, and which are to be estimated by the five hundred pounds.

The criticisms that have been made do not derive their force from the names of either Mr. McClintock or myself, but if they have any, from the fact that they are just. We leave the profession to judge of this, feeling that they will do so without regard to name or position.

J. R. DUGGAN.

AUGUST 24, 1885.

COINCIDENT CEREBRATION.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR: *The Lancet* for August 15, 1885, contains a communication from "Nelson B. De Sizer, M.D. and Bac. Sc." (Neo-Eboracensis), dated "Brooklyn, New York, August, 1884," on the comparative danger of various anæsthetics. With the exception of the four introductory lines, the letter is an almost literal transcript of the seventy-ninth page of a work on "Artificial Anæsthesia and Anæsthetics," published by William Wood & Co., A.D. 1881. Of this republication of those statistics in the form of an original article, I do not now complain; but I do regret that the gentleman did not improve the occasion by adding to those figures, whose collection cost me so much labor, a new series of observations compiled from the literature that has accumulated during the past five years—a literature to which I have not access. I remain, Sir, yours truly,

HENRY M. LYMAN, A.M., M.D.

CHICAGO, ILL., August 27, 1885.

RHUS AROMATICA IN THE TREATMENT OF ENURESIS.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR: Since the publication of the brief article in THE RECORD of July 25th on rhus *aromatica* (not rhus toxicodendron) in the treatment of enuresis, I have received a number of letters from physicians in different parts of the country, asking for further information in regard to the remedy. For the benefit of those interested I will say that my experience with the drug has been confined chiefly to the treatment of children. For a child ten years of age I usually prescribe ten or fifteen drops—of a reliable fluid extract—three or four times a day—say a dose after each meal and at bedtime, to be given in a little glycerine and water, or other suitable excipient. No special nicety need be observed in regard to dosage, as it is regarded as harmless if given in any quantity which an intelligent physician would be likely to prescribe. In reply to your Boston correspondent (see RECORD of August 15th), I will say that I wrote rhus *aromatica* in the text of the article of July 25th, and either the editor of THE RECORD or the printer supplied the headline, and erroneously wrote rhus *toxicodendron*. So far as I know the latter drug is of no benefit in enuresis. The good effects of rhus aromatica are usually manifested quite promptly—frequently giving relief within the first two or three days. I have also found the drug useful in the diarrhœas of both adults and children arising from intestinal indigestion.

Those desiring further information can obtain the same by referring to the *Therapeutic Gazette* for May, 1882. Yours respectfully,

GEORGE W. WILLEFORD, M.D.

GLENDALE, IND., August 20, 1885.

THE FAMILY DOCTOR.—Little Boy: "Please, I want the doctor to come and see mother." Servant: "Doctor's out. Where do you come from?" Little Boy: "What! Don't you know me? Why, we deal with you. We had a baby from here last week!"

Army and Navy News.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from August 30, 1885, to September 5, 1885.

MAGRUDER, D. L., Lieutenant-Colonel and Surgeon. Granted leave of absence for fifteen days. S. O. 210, A. G. O., September 3, 1885.

MIDDLETON, PASSMORE, Major and Surgeon. Assigned to duty as attending surgeon at these headquarters, vice Major J. V. D. Middleton, Surgeon, hereby relieved. S. O. 131, Department of the Missouri, August 28, 1885.

GIRARD, ALFRED C., Captain and Assistant Surgeon. Assigned to duty as post surgeon at Boise Barracks, Idaho Ter. S. O. 142, Department of the Columbia, August 22, 1885.

DAVIS, WILLIAM B., Captain and Assistant Surgeon. Having reported for orders from leave of absence, assigned to duty at Fort Porter, N. Y., as post surgeon. S. O. 183, Department of the East, August 28, 1885.

KANE, JOHN J., Captain and Assistant Surgeon. Upon expiration of his present leave of absence, to be relieved from duty at Willet's Point, New York Harbor, and to report to Commanding General, Department of Texas, for assignment to duty. S. O. 201, A. G. O., September 3, 1885.

BANISTER, JOHN M., Captain and Assistant Surgeon. Assigned to temporary duty at the camp of the competitors at Creedmoor, N. Y., arriving not later than September 4, 1885. S. O. 58, Division of the Atlantic, August 31, 1885.

RICHARD, CHARLES, Captain and Assistant Surgeon. To be relieved from duty in Department of the East, and to report to the Commanding Officer, Willet's Point, N. Y., for duty at that station. S. O. 201, C. S., A. G. O.

KENDALL, WILLIAM P., First Lieutenant and Assistant Surgeon. (Recently appointed.) To report in person to the Commanding General, Department of California, for assignment to duty. S. O. 201, A. G. O., September 3, 1885.

Official List of Changes in the Medical Corps of the United States Navy for the week ending September 5, 1885.

STEWART, HENRY, Surgeon. Leave of absence extended one year from October 15th, with permission to remain abroad.

STEELE, JOHN M., Passed Assistant Surgeon. Detached, September 1st, from Constellation, and report for duty at Naval Academy, Annapolis, Md.

BRIGHT, GEORGE A., Surgeon. Detached, September 1st, from Constellation, and wait orders.

DICKSON, S. H., Passed Assistant Surgeon. Ordered to Naval Academy, Annapolis, Md., as relief of Passed Assistant Surgeon A. A. Austin.

FITTS, HENRY B., Assistant Surgeon. Detached from Coast Survey Steamer Gedney, and wait orders.

AUSTIN, A. A., Passed Assistant Surgeon. Detached from Naval Academy, Annapolis, Md., and ordered to Coast Survey Steamer Gedney, to relieve Assistant Surgeon H. B. Fitts.

OLEUM DEELINÆ, or deelina oil, is the name given by Dr. John Roberts, of Chester, England, to a refined petroleum, prepared on the banks of the Dee, and which is recommended for medicinal and surgical use, on account of its greater purity than vaseline. Although it is an oil, little or no greasiness is left on its application; it is readily absorbed, has no odor, and never becomes rancid. Dr. Roberts regards it as "almost a specific" in eczema and kindred diseases of the skin.

Medical Items.

CONTAGIOUS DISEASES—WEEKLY STATEMENT.—Report of cases and deaths from contagious diseases reported to the Sanitary Bureau, Health Department, for the week ending September 5, 1885:

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-spinal Meningitis.	Measles.	Diphtheria.	Small-pox.	Yellow Fever.
Cases.								
September 5, 1885.....	0	37	11	1	8	28	2	0
Deaths.								
September 5, 1885.....	0	10	2	1	1	18	0	0

TREATMENT OF EPISTAXIS.—Introduce into the nostril, to a considerable distance upward, a piece of fine sponge cut to the size and shape necessary to enable it to enter without difficulty, previously soaked in lemon juice or vinegar and water. The patient is to be kept lying on the face for a length of time with the sponge in place.

SCROTAL CALCULI.—Dr. Schkott, of Moscow, has recently described, in a Russian medical periodical, the case of a patient, aged twenty-seven, who, when a child, was subject to some obscure disease of the scrotum, and noticed, later on, that he apparently had developed a third testicle, much harder than the two normal glands. For seven years before he came under Dr. Schkott's care in hospital, he frequently passed blood in his urine, and for two years micturition and coitus had been attended with pain. The third testicle reached the size of a goose's egg. Three months before admission he struck the scrotum, which inflamed and suppurated. The abscess burst, and left a fistulous track. On passing a probe into the track, three hard substances, which could be moved separately, were distinctly felt. On passing a catheter, a fistula was detected in the membranous part of the urethra. The scrotum was incised, and seven uric acid calculi were found in a capsule of connective-tissue, fitting closely against each other. Dr. Schkott excised the sac after extracting the calculi, and closed the urethral fistula first with catgut, and then sutured the scrotal wound with the same material. The fistula opened up again, but was successfully closed by a second operation.—*The British Medical Journal.*

POWDERED RICE AS A STYPTIC.—It is said that powdered rice as a styptic remedy has a great effect on fresh wounds, much superior to oxide of zinc. By mixing from four to eleven per cent. of it with lint, and using the lint thus treated as a compress, it is very effectual and more valuable than subnitrate of bismuth, salicylic acid, or carbolic acid.

SALICYLIC LEMONADE.—The *British and Colonial Druggist* says that as a "hospital beverage," which has lately been found of very great value in cases of typhoid and other fevers, scurvy, and gout, the following cannot be too widely known, it having been, we understand, first devised by a late medical officer attached to the Soudan expedition: ℞. Fruct. limon., No. 10; acid. citric., ʒ ss.; acid. salicylic., gr. cc.; sacch. alb., aquæ, ää q. s. Squeeze the lemons and put the juice aside; boil the fruit in half or three-fourths of a gallon of water for fifteen or twenty minutes; after standing six hours take out the lemons, and again press them before throwing the exhausted pieces away. Add the juice and citric acid to the liquid, boil five minutes, and strain. While hot add the salicylic acid, and stir until dissolved. Sweeten to taste with the white sugar, and make up the bulk to one gallon of water. Salicylic lemonade may be taken freely, either of the strength here given, or diluted with half its bulk of water. It should be freshly made every two or three days, unless it be permissible to "qualify" it by the addition of a little pure French brandy. If required to be in "bright" condition, add, when cold, a little beaten-up white of egg, boil for three minutes, and filter. If found rather too harsh for some tastes, dissolve in the boiling liquid, before straining, half an ounce of Nelson's Patent Opaque Gelatin, previously swelled for five hours in cold water.

OVARIOTOMY IN BELGIUM.—An interesting event was celebrated by a festival at Ghent recently. Dr. Boddaert, one of the most distinguished of Belgian surgeons, having completed one hundred cases of ovariotomy received thereupon the congratulations of many of his professional brethren. Sir Spencer Wells was to have been present, but was unavoidably detained in London. A letter from him was treated as the proposal of the toast of the evening, and a reply was sent by telegraph that the company were drinking his health in bumpers of champagne. Considering that Sir Spencer Wells performed ovariotomy in Brussels for the first time in 1865, and had a successful case in Ghent with Dr. Boddaert in 1871, when the operation was still a novelty, it is not a little surprising that one Belgian surgeon should already have had one hundred cases.—*The British Medical Journal.*

ATTEMPTED SUICIDE THROUGH DRINKING KEROSENE.—A patient was recently admitted into the Lariboisière Hospital, who had attempted suicide by drinking petroleum. She suffered from an intense burning sensation in the mouth, œsophagus, and stomach. She was very excited from the effect of pain and disappointment at having failed in her suicidal attempt; she exhaled a strong odor of petroleum. Two grammes of ipecacuanha, supplemented by several glasses of milk, provoked vomiting. The vomited matter was covered by a layer of petroleum, which presented the aspect of continuous grease-spots. After an enema was administered, she had a motion, which presented the same peculiarity as the matter vomited, and also smelled strongly of petroleum. She continued to take large quantities of milk. She gradually recovered, and ate the ordinary fare. Small doses of quinine-sulphate cured the pains in her head, which had caused her much suffering, and in ten days she was convalescent. During four days she exhaled an odor of petroleum.

CÆSAREAN SECTION IN CENTRAL AFRICA.—In a recent article on the postures adopted by women in labor in Central Africa, Dr. Breitmann gives an interesting account of the operation of Cæsarean section, as witnessed by Dr. R. W. Felkin at Kahura (*The Medical Press and Circular*, July 15, 1885). The case was that of a very handsome young negro woman, a healthy primipara, aged twenty years. He entered the hut just at the commencement of the operation, but was not permitted to convince himself of the condition of affairs by examination. By the side of the half-intoxicated patient stood a quantity of banana wine. A bandage of Mbugu, a stiff material made from the bark of a tree, went over the breast, and bound the patient firmly to the bed, another passed over the thighs; an assistant held fast the feet, and another, standing on the right side, held the skin of the abdomen on the stretch. The operator, holding aloft the knife, muttered a prayer. After the completion of the ceremony he thoroughly washed the abdomen of the woman and his own hands with banana wine, uttered a piercing cry, which was repeated by those standing without, and made an incision from the pubes almost to the umbilicus, and right into the uterus, so that the liquor amnii gushed out. Some bleeding vessels were successfully touched with the actual cautery. The operator quickly extracted the child, while a second assistant drew the edges of the uterine wound apart and compressed them. After division of the umbilical cord the child was handed to a woman, the operator laid aside the knife, grasped the uterus and compressed it with both

hands with all his might. He then dilated the cervix with two or three fingers, removed the blood-clots and the placenta, while the assistants were busy in arranging the intestines, and especially in preventing any portion getting between the edge of the wound. What bleeding still continued was stopped by the actual cautery, while the operator still compressed the uterus until it was firmly contracted. No sutures were inserted. The assistant who had before held the abdominal wall on the stretch grasped the angle of the wound and the whole wound was covered with an herb pad. The bandages were now loosed, the assistant grasped the patient by the arms and turned her over into a position in which the fluid in the abdominal cavity flowed out. She was then brought back into the former position, the herb covering was removed, the edges of the wound were carefully adjusted and fixed with well polished needles, similar to acupressure needles, and made fast by an encircling thread. A paste prepared from two different roots by chewing was laid over the wound in the place of plaster, over this a previously warmed banana leaf, and the whole fastened on with Mbugu bandage. Up to the moment when the needles were inserted the patient had evinced no expression of pain, and an hour after the operation was in good spirits. The temperature did not rise above 37.5°, C. except during the first night, when it reached 39°. Pulse 108. Two hours after the operation the child was put to the breast, but after about ten days, as the milk stopped, it was fed by another woman of the tribe. The first change of dressing was made on the third day, a needle was removed, then more followed on the fifth, and the remainder on the sixth. At every change of dressing fresh "ointment" was put on, and the secretion from the wound removed with a tampon charged with it. The dressing was always solid, and in nine days after the operation the wound was healed and the patient quite well. Beyond the interest which naturally attaches to a case of this nature, it is heightened in the present instance by the quaint native proceedings and the decidedly civilized method employed by the chief operator.

"Gall on the Liver."—During a consultation of physicians, a doctor, who, though lacking a college education, has the—to his mind—superior qualification of experience gained in fifteen years of practice, gravely stated his diagnosis to be "gall on the liver," and, judging from the amount of gas he had heard escape from the child's bowels, it was evident it also had a severe gastritis.

Cæsarean Section by an Ox.—Dr. J. Z. Scott, of Scandia, Kans., reports the following unique case: Mrs. P——, aged thirty-four, the mother of seven children, and near full term in her eighth pregnancy, on November 16th was gored by an infuriated ox. The horn of the beast entered at the anterior-superior spinous process of the ilium, and made a rent extending to the umbilicus, and involving both the abdominal parietes and the walls of the uterus. The child was extruded through the wound in half an hour after the occurrence of the accident. When Dr. Scott arrived on the scene he found the child fully delivered, but remaining attached to the cord, which he ligatured and severed. There being no dilatation of either the os uteri or the vagina, he delivered the placenta through the rent and applied a bandage. The patient was almost lifeless from hemorrhage and shock, and he placed her on morphine and whiskey. On the following day she was still alive, and Dr. Means was called in consultation at 9.30 A.M. The small intestines escaped from the wound on the removal of the bandage, and were returned with much difficulty. The wound was now closed with interrupted sutures, a carbolized compress was applied, and the morphine and whiskey continued internally. At 5 P.M. of the same day he found the pulse 130, and respiration 25 per minute. The abdomen was greatly distended, and the vital powers were fast becoming exhausted. On the following morning he found on his visit that the woman had expired at ten o'clock of the previous night. Dr. Scott believes this case to be the only authentic instance of Cæsarean section performed by a beast on record. It may be interesting to know that the child suffered little or nothing from the violent and unusual method of its delivery, and is alive to-day, a vigorous and thriving boy.—*The Medical Age*, August 10, 1885.

Teaching very Deaf Children at Home is described by an experienced teacher, Miss Warren. The deaf infant's attention is not arrested by the mother's voice as in the case of the hearing; it is thus not trained by degrees to enjoy sound. Its mind is a blank as to the "ba ba" and "da da," which early impress the unafflicted. The elements of spoken language are not found in its prattle; it is slow to associate the name with the object. A gradual improvement in the growth of speech-power in the hearing child is in proportion to the cultivation of the hearing power; the deaf child, however, is without that advantage unless direct teaching is given. Frequently a tube or trumpet is useful in arousing some latent hearing; the child gradually learns to recognize and repeat the various vowel sounds as they are spoken through it. Brightly colored pictures are shown and each object pointed out as its name is pronounced slowly, distinctly, and in a low voice near or in the pupil's ear; a loud voice will generally defeat the purpose, as its impact is so hard that it causes a shock at the expense of distinctness. The child is encouraged to repeat the word as well as it can. It may be long in remembering even one name. The lesson may be varied in many ways. Some sounds the child can learn only by placing the lips and tongue as those of the teacher are. This is the beginning of speech-reading. Variability in the hearing will often be noticed—when the child is tired, or neglecting to give attention, or when a catarrhal inflammation interferes with the equilibrium of the transmitting apparatus of the ear, upon which normal hearing depends, and which is sometimes subject to unexpected variations. Systematic instruction educates the amount of hearing that may exist, trains the eye to interpret for the ear, and awakens the young mind to the power and pleasures of speech. If hearing has been lost by illness after a child has begun to speak, it must be encouraged to use its voice until special instruction can be secured.

Longevity and Riches.—Joseph Körösi, of Buda-Pesth, in a paper read before the Association of Hygiene, in Berlin, last year, presents some figures regarding the effect of the pecuniary status of longevity. Excluding deaths in infancy, he finds, taking his observations from a period of eight years, that the rich class had a longevity of 52 years, the middle class of 46 years 1.1 month, the poor class of 41 years 7 months. In the matter of susceptibility to infectious diseases he finds that cholera, small-pox, measles, and typhoid are more prevalent among the poor, and diphtheria, croup, pertussis, and scarlet fever among the well-to-do. Zymotic diseases, as a whole, were sixty per cent. more frequent among those living in basements than in higher domiciles. But the increase in fatality in underground tenements applied only to certain diseases, as especially measles and whooping-cough, while diphtheria and scarlet fever were ten per cent. less frequent than in families living above ground.

Herpes Iris affecting the Conjunctiva.—Dr. Bergmeister describes a case of recurrent herpes iris of the conjunctiva in a stone-worker, aged thirty, who had suffered from eight attacks. The mucous membrane of the nose and mouth were free, but the skin of both arms and legs were affected with the characteristic rash. A croupous membrane was seen in the eyes; the lids were swollen, and there was much catarrhal secretion. Similar cases have been mentioned by Fuchs in 1876, and by Neumann in 1883.

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Original Articles.

HYDROBROMATE OF HYOSCINE—ITS USE IN CASES OF INSANITY.

BY FREDERICK PETERSON, M.D., AND CHARLES H. LANGDON, M.D.,

ASSISTANT PHYSICIANS AT THE HUDSON RIVER STATE HOSPITAL, N. Y.

AT meetings of the German Chemical Society, April 30, and July 26, 1880 (*Berichte der deutsch. chem. Gesellschaft*, vol. xiii., 909 and 1549), Professor A. Ladenburg reported some results of his researches among mydriatic alkaloids, particularly those of *Hyoscyamus niger*. At that time this plant was known to have two alkaloids, viz., crystallized and amorphous hyoscyamine. He derived a new alkaloid, hyoscine, from the latter, and it is not, as some suppose (Höhn and Reichardt), to be obtained from crystalline hyoscyamine. He finds that hyoscine, hyoscyamine, and atropia are actually isomeric, the formula for each being $C_{17}H_{23}NO_3$, and furthermore that each is separable into tropic acid, $C_9H_{10}O_3$, and tropine or pseudotropine, $C_8H_{15}NO_2$. He has also converted hyoscyamine into atropine, and atropine into hyoscyamine in his laboratory; though he has not thus far been able to transform hyoscine into either of the other mydriatics. He gave the new alkaloid to Professor Edlessen and Dr. Illing of the Kiel Policlinic for trial as to its medicinal effects. We condense the medical literature of hyoscine to the present time, as far as we know it, into the following:

Edlessen and Illing (*Centralb. für die med. Wissenschaft*, June 4, 1881) used the hydrochlorate and hydroiodate of hyoscine, preferring the latter, and giving it altogether by mouth in average doses of 1.2 milligr. They report beneficial effects in three of six cases of whooping-cough in children, six cases of asthma, two cases of enteralgia, and one of epilepsy; in the last diminishing the number of attacks. They consider it similar to atropine, but safer and more constant in its action; they also state that larger doses of hyoscine may be used without producing the constitutional symptoms common to both.

R. Gnauck, of the Charité psychiatric clinic (*Centralb. für die med. Wissenschaft*, November 5, 1881, and February 11, 1882; also *Charité Annalen*, 1882, 448), using it in both healthy and insane persons, says that it gives rise to the same physical disturbances as atropine and hyoscyamine, that like the latter it induces sleep and fatigue, but that unlike either it reduces the pulse. He further states hyoscyamine and hyoscine differ from atropine in tending to produce sleep, and that the sleep caused by hyoscine lasts but half as long as that from hyoscyamine. He employed it subcutaneously in doses of 0.0001 to 0.0025 gramme.

The above experimenters all pronounce hyoscine unusually uncertain in its effect upon different persons in the same dose, and even upon the same person at different times.

E. Emmert (*Corresp. Bl. f. schweiz. Aertzte*, 1882, No. 2) finds it much more rapid in its mydriatic action than atropine, and remarks that it should not be used in stronger than one-half per cent. solution, because of the danger of constitutional effects.

Fraentzel (*Charité Annalen*, viii., 1883, p. 301) used the hydroiodate in the night-sweats of phthisis, with marked benefit in ten cases out of twenty-nine experimented upon, in doses of one-half to one milligr.

J. A. Claussen (*Diss. Kiel*, 1883; *Centralb. f. d. med. Wiss.*, July 12, 1884) made use of the hydrobromate and hydroiodate in several cases where there was sleeplessness, without specially good, and in one with bad, results.

H. C. Wood (*Therapeutic Gazette*, January and February, 1885) has made the hydrobromate familiar to American readers by his excellent articles upon the subject. He finds hyoscine a spinal, centric respiratory and feebly cardiac depressant. The following is quoted from his first paper: "The peculiar therapeutic value which this physiological study leads us to look for in hyoscine arises from the union of decided hypnotic powers with a spinal sedative influence and a very feeble depressant action on the circulation. The experiments so far indicate also freedom from disturbance of the secretions and unpleasant after-effects."

Led by such praise, we tested the efficacy of the new and tasteless remedy in about sixty cases, some of which we here report. We sought chiefly to learn its hypnotic value. We have used some forty grains of Merck's hydrobromate of hyoscine, at seventy-seven cents per grain, both by mouth and hypodermatically. The largest dose we have given is gr. $\frac{1}{24}$ by mouth, gr. $\frac{1}{48}$ subcutaneously. In the appended reports of cases, the letters H. H. are an abbreviation of hydrobromate of hyoscine; doses are given in fractions of *grains;* where the method of its employment is not mentioned the doses are by mouth.

MELANCHOLIA.—CASE I.—A. A——, female, aged fifty-five; much depressed, moaning and crying aloud, delusions that her soul is lost, that she is damned, must be burned, etc., sleepless. Has slept from one to five hours nightly for the past month on two doses, each containing pot. brom., chloral, āā gr. xx. Prescribed H. H. for nearly a month, at first gr. $\frac{1}{96}$ ter in die et $\frac{1}{72}$ bis in nocte. The pupils were dilated on the second day, and there was also headache and dryness of the fauces and tongue. This, together with disturbance of accommodation, continued as long as the drug was used. At no time were constitutional symptoms severe. On the seventh day the dose was increased to gr. $\frac{1}{72}$ t.i.d. On the tenth night the dose was increased to gr. $\frac{1}{60}$ b.i.n. She had thus far slept some four to five hours nightly with these doses, but the amount of sleep seemed to diminish, and on the fifteenth night morph., gr. $\frac{1}{8}$, was added to the two night doses of H. H., gr. $\frac{1}{60}$. From this time to the end of the month, she has slept five to six hours nightly. She is at present sleeping well on small doses of chloral and bromide. H. H. discontinued, because of disturbance to vision.

CASE II.—D. B——, female, aged twenty-eight; somewhat depressed, marked insomnia. Has usually required tr. hyos., 3 ij.; chloral, gr. x., to produce three to seven hours' sleep nightly. Prescribed H. H. for twenty nights, beginning with grain $\frac{1}{96}$ b.i.n., increasing on the thirteenth night to gr. $\frac{1}{72}$ b.i.n. During the latter half of the twenty nights the medicine seemed to affect her less. She slept fairly at first. A few constitutional symptoms appeared, the dilatation of pupils, disturbance of accommodation, dryness of throat, etc. On the twentieth day began to have nausea, abdominal pains and diarrhœa. The H. H., although not blamed for this, was discontinued. For a few nights she took Dover's powders b.i.n., which checked the looseness of bowels but caused no sleep. After that she slept well on chloral and bromide in small doses.

CASE III.—A. H——, female, aged forty-six; great depression, sometimes excitement, sleeplessness. Has required usually tr. hyos., 3 ij.; morph. sulph. gr. $\frac{1}{8}$, for the past ten nights to produce three to six hours sleep. Prescribed H. H., gr. $\frac{1}{100}$ t.i.d. et b.i.n., off and on for twenty-four days. Dilatation of pupils was the first effect. On the tenth night took gr. $\frac{1}{12}$ at 1 A.M., and was sleepless all night. Since beginning the H. H. she has slept very little. When she had sleep it came on from three-quarters to two hours after the doses were taken, and would last but two hours or so. She complains of thirst, her pupils are wide, skin cold, pulse 128, feels faint, has abdominal pains and diarrhœa. Is sent to bed and H. H. stopped. Eleventh day, pulse again normal; diarrhœa has ceased. For the remainder of the time she took gr. $\frac{1}{60}$ at night, without return of bad symptoms, but slept poorly. After the twenty-fourth day she refused to take the medicine, and has slept fairly well since without a hypnotic.

CASE IV.—C. E. P——, female, aged fifty; restless, sleepless, walks up and down bemoaning her fate aloud. For a week previous was sleepless at home, and sleepless the first night of admission. Was put upon H. H., gr. $\frac{1}{100}$ b.i.n., for eight nights. The first two or three nights was sleepless, then for two nights slept four to five hours, after that sleepless and more excited. At the end of the eight days' trial was put upon tr. hyos., 3 ij.; chloral, gr. x., b.i.n., with which she has slept from one to four hours nightly since. The constitutional symptoms from H. H. were present, but slight. When sleep seemed to be produced by it at all, from one to two hours were required before any effect was apparent.

CASE V.—I. C——, female, aged twenty-four; excited, crying aloud at times, thinks she has killed her family; sleepless for some nights before admission. The first night in the hospital she slept three hours with tr. hyos., 3 ij.; chloral, gr. x. Was put upon H. H., gr. $\frac{1}{100}$ b.i.n., for six nights, and slept four to six hours each night. A few slight constitutional symptoms were produced. Not caring to produce more, tr. hyos., 3 j.; chloral, gr. x., one dose at night, has been prescribed since, resulting in from five to six hours' sleep nightly.

CASE VI.—E. B——, female, aged fifty-three; restless, apprehensive; sleeps poorly, has præcordial fright and headache. Has slept sufficiently of late with tr. hyos., 3 ij.; morph. sulph., gr. $\frac{1}{4}$. Prescribed H. H., gr. $\frac{1}{100}$ t.i.d., at different times through a month, and often H. H., gr. $\frac{1}{12}$; morph. sulph., gr. $\frac{1}{8}$, at night. In two or three days she invariably became more nervous and excited, vision blurred, pupils dilated, præcordial fright greater, throat parched, and diarrhœa would set in, whereas she is naturally constipated and requires mist. aloes, 3 j., every morning. Her bowels would move four to five times daily. As soon as the H. H. was stopped she became constipated; upon its renewal there was again laxity of the bowels. This was tried four times with the same result. The above dose of H. H. and morph. induced sufficient sleep.

CASE VII.—S. N——, female, aged fifty-seven; constantly walking, talking, bewailing, picking and tearing her clothes. Up to within a few days has slept well without a hypnotic, but latterly has been out of bed and noisy the last half of each night. H. H., gr. $\frac{1}{100}$, was given for seven nights, gr. $\frac{1}{60}$ for fourteen nights subsequently. For the first few nights slept from four to five hours with this dose, but she gradually began to sleep less and to be more excitable through the rest of the time. Sleep would not come on until an hour or more had elapsed from the time of taking the dose. There was dilatation of pupils, dryness of throat, etc., from the beginning. Since abandoning the drug she has slept well without medicine.

CASE VIII.—J. D——, male, aged twenty-two; confused, depressed, delusion that he is in every way ruined; paces restlessly to and fro during day. Has been for some weeks sleeping well at night. Prescribed H. H., gr. $\frac{1}{100}$ t.i.d. five days, gr. $\frac{1}{100}$ for six days, and gr. $\frac{1}{120}$ for fourteen days—twenty-five days in all. On the fourth day pupils were dilated, pulse feeble, and extremities cold. On the twelfth day pulse was 100 and irregular. No change in his restlessness or mental condition. On the twentieth day was much more agitated, wringing his hands, etc. At 8.45 P.M. pulse was 82; H. H., gr. $\frac{1}{100}$, was given hypodermatically. Nine o'clock, pulse 78, pupils much dilated. Says he feels "faint;" went to bed at 9.45 P.M., and slept the greater part of the night. The next day he was depressed as usual, lamenting, walking restlessly to and fro, pupils very widely dilated, mouth and throat dry. On the twenty-fifth day he was very much agitated and disturbed, and H. H. was discontinued and Brown-Séquard's mixture of the bromides substituted. On the thirtieth day he was much quieter, though depressed as before. His appetite, which became impaired while on H. H., has also improved.

CASE IX.—C. C. J——, male, aged thirty-five; quiet, confused, depressed, has auditory hallucinations, and under their influence is at times violent. For several nights has taken potassii bromidi and morph. sulph. Prescribed H. H., gr. $\frac{1}{100}$ twice nightly for four nights, when the dose was increased to gr. $\frac{1}{12}$ b.i.n., and H. H., gr. $\frac{1}{100}$, was ordered t.i.d. With the exception of two hours during the first night, two hours during the fourth night, patient has had no sleep since he commenced taking H. H., his appetite has failed and he has become more confused. On the sixth day, after passing a sleepless night, his pupils were very widely dilated; pulse 42, small and almost thready; extremities cold; muscular tremor present, mouth parched; he was utterly dazed and bewildered. H. H. was discontinued and stimulants ordered. The next day his pulse was 78 and stronger. On the ninth day he was ordered H. H., gr. $\frac{1}{12}$; morph. sulph., gr. $\frac{1}{4}$; sp. frumenti, $\frac{3}{3}$ j., b.i.n. for fourteen days. For the first two nights this combination seemed to produce from five to seven hours' sleep, but after that the amount of sleep obtained steadily decreased. On the twenty-third day night medicine was changed to morph. sulph., gr. $\frac{1}{4}$; tr. hyos., 3 ij., b.i.n. While taking H. H. at night pulse would usually fall to 50, appetite became impaired, and there was no improvement in his mental condition.

CASE X.—M. B——, male, aged twenty-nine; noisy, garrulous, restless, unhappy. Sleeps well usually at night. Prescribed H. H., gr. $\frac{1}{100}$ ter in die. On the fourth day is much quieter; pupils dilated; throat dry. On the sixth day the dose of H. H. was increased to gr. $\frac{1}{12}$. On the eleventh day pulse was 78 and feeble, circulation poor. Appetite has been poor for past week, and for two days past has complained of nausea and pain in abdomen. Complains of shortness of breath; says he "can scarcely get his breath." Refusing to take his medicine it was discontinued. Continued quiet for two days and then became noisy and garrulous as before, when it was again prescribed, producing similar train of symptoms, viz., dilatation of the pupils, dryness of fauces and throat, anorexia, but marked diminution of his garrulity.

CASE XI.—T. M.——, male, aged thirty; quiet, confused, sullen, suspicious, depressed. Is troubled with insomnia, but obtains three to six hours of sleep after taking chloral and tr. hyos., or morphine. Prescribed H. H., gr. $\frac{1}{100}$ b.i.n. Did not sleep any during the first two nights. On the third day there was increased excitement; he was noisy at times and destructive; pupils are dilated; throat is dry; says that he thinks one of the attendants jumped down his throat and is stuck there. H. H., gr. $\frac{1}{12}$, ordered b.i.n. for four nights. Slept for three hours the first of these nights, but did not sleep during any of the other three. H. H., gr. $\frac{1}{60}$ b.i.n., ordered for one night; pulse varied from 56 to 60 during the night; did not sleep. H. H., gr. $\frac{1}{48}$ b.i.n., ordered for ten nights. During this time but two hours of sleep a night were obtained; constitutional symptoms were

marked; pupils dilated, throat dry, there was considerable irritation of the skin, and an apparent sensation of heat; patient scratches himself much; much muscular tremor present. The next night two doses of H. H., gr. $\frac{1}{3\frac{1}{2}}$, were now given, producing only two hours of sleep. The following night no H. H. was given, but took chloral, gr. xx., in whiskey punch; slept only one hour, and was noisy afterward. H. H., gr. $\frac{1}{7\frac{1}{2}}$; morph. sulph., gr. $\frac{1}{4}$; sp. frumenti, ℥ j., was now ordered b.i.n. for three nights. The first of these nights he obtained two hours of sleep and was quiet. The following day he was greatly disturbed, was violent and treacherous and destructive. At noon his pulse was 88; H. H., gr. $\frac{1}{4\frac{1}{8}}$, administered hypodermatically. Ten minutes after injection pulse was 96; ten minutes later pulse was 114. Five minutes later he became delirious, very noisy, incoherent, weeping and sobbing. This excitement continued for twenty minutes and then subsided, and he became very quiet and remained so for some hours, but did not sleep, and did not sleep during the succeeding night and the night after that. Is dazed, bewildered, tremulous, excitable, pupils dilated, staggers in walking; pulse feeble and rapid; looks haggard and general appearance is bad; scratches himself; tears off his clothing. Ordered H. H. to be discontinued. Prescribed Brown-Séquard's mixture during the day and chloral and tr. hyos. at night. The first night of the change he slept for six hours, and since then to the time of present writing, six days, he slept the greater portion of each night. Constitutional effects of H. H. have disappeared; appetite has improved; is not noisy or destructive.

Case XII.—B. S. K——, male, aged thirty; confused, depressed, excited. Has increased motility, walks much; has marked auditory and ocular hallucinations; thinks he is being persecuted by enemies and spirits. Pulse full, and at times rapid. Sleep irregular. Usually takes morph. sulph. and Brown-Séquard's mixture at night, and sleeps from six to seven hours, though occasionally will not sleep any, and occasionally will sleep all night without medicine. Is taking Brown-Séquard's mixture, ℥ j. t.i.d. Prescribed H. H., gr. $\frac{1}{9\frac{1}{6}}$ ad nocte. Slept well the first night. The second night was restless and slept only two hours. Slept four hours the third night, and on the following day was very much disturbed, noisy, and violent; hallucinations of hearing prominent. On the fourth night slept but two hours, and was much excited after two o'clock. Noisy, shouting "Murder!" "Fire!" Was given a dose of potass. brom., ℥ ss.; morph. sulph., gr. $\frac{1}{4}$, and soon became quieter. Fifth, sixth, seventh, and eighth nights slept without medicine. Ninth, tenth, and eleventh nights took H. H., gr. $\frac{1}{9\frac{1}{6}}$, at 10 P.M., and slept afterward. Pupils are now dilated, throat dry. Hallucinations much less marked; is quiet; says he is feeling better. Twelfth day was wakeful much of the night. H. H., gr. $\frac{1}{7\frac{1}{2}}$, ordered b.i.n. Thirteenth day took doses at ten o'clock and at one o'clock; slept one hour after the first and two hours after the second dose. Fourteenth day slept half the night without medicine. From the fifteenth to the twenty-third night, with the exception of the sixteenth, when he slept three hours, he obtained seven to eight hours' sleep each night after taking one dose of H. H. Is now becoming more disturbed during day, and hallucinations of hearing are again troublesome, pupils are dilated and throat dry, pulse is normal. Brown-Séquard's mixture is discontinued, and H. H., gr. $\frac{1}{7\frac{1}{2}}$, ordered t.i.d. Twenty-fourth day slept most of the night after taking H. H., gr. $\frac{1}{9\frac{1}{6}}$, at ten o'clock. Thirty-fourth day: Has continued to take H. H., gr. $\frac{1}{7\frac{1}{2}}$, t.i.d. et gr. $\frac{1}{9\frac{1}{6}}$ ad nocte. Has been quiet during the day; is less confused and depressed; not so restless. With the exception of the twenty sixth night, when he was restless, the greater part of the time he has slept well for the past ten nights. Pupils are dilated and throat is dry. Of late there has been anorexia and medicine is discontinued.

Remarks.—We have tried H. H. in these cases more particularly to test its hypnotic effect and power to allay excitement, not so much with a view to ameliorate the psychic symptoms of melancholia, and find that it has no particular value for either.

Acute Mania.—Case XIII.—A. G——, male, aged forty; noisy, incoherent, destructive, and violent. Has hitherto slept well on one dose nightly of tr. hyos., 3 ij.; chloral, gr. xv. Is put upon H. H., gr. $\frac{1}{9\frac{1}{6}}$ t.i.d. et ad nocte. Sixth day: Has slept well thus far, but last night only three hours. Is more excited, jumping wildly about and shouting; pupils wide, extremities cold, face flushed, mouth dry. Eighth day: Quieter. Tenth day: Sleeps two to three hours now; pulse during night 56. Night dose of H. H. increased to gr. $\frac{1}{7\frac{1}{2}}$ b.i.n. Eighteenth day: Sleeps two to three hours only; very excitable to-day, noisy and destructive; noisy at night when not asleep; pulse varies nightly from 78 to 64. At 2.50 P.M. to-day extremely boisterous; pulse 90. Is given H. H., gr. $\frac{1}{9\frac{1}{6}}$, hypodermatically. 2.55 P.M., pulse 86. 2.57 P.M., pulse 92. 3 P.M., pulse 80. 3.15 P.M., pulse 80. Fought desperately against a second hypodermatic with a chair; said he felt drugged. Became very violent and furious, wrenching a strong chair from the floor and breaking it. This excitement was of short duration. 3.50 P.M., quiet and lying down. 4.05 P.M., pulse 120; again very noisy and excited. 4.45 P.M., took gr. $\frac{1}{9\frac{1}{6}}$ by mouth; pulse 80; is quiet. 5 P.M., pulse 70; very quiet, face flushed, voice hoarse. 9 P.M., has slept until now; awake and quiet; pulse 62. Twenty-first day: Has slept two to three hours nightly since last note on usual doses; pulse varies nightly from 88 to 64, and is often variable by day. To-day is very much disturbed and violent; tears off his clothing, and seems to have an unnatural sensation of heat of skin. Pupils widely dilated and face flushed. Twenty-fourth day: Continues noisy and destructive of clothing; sleeps but two to three hours at night with usual doses; pulse varies nightly from 80 to 60. Night doses now increased to $\frac{1}{6\frac{1}{0}}$. Twenty-fifth day: Slept but three hours last night. Night doses increased to gr. $\frac{1}{4\frac{1}{8}}$. Twenty-seventh day: Slept but three hours the last two nights; more excited to-day; pupils widely dilated; scratches chest, back, and arms, and tears off clothing. The H. H. is now discontinued altogether. Thirty-fifth day: Has slept well every night since last note on tr. hyos. and chloral, and has grown quieter on Brown-Séquard's mixt. t.i.d. Now keeps his clothing on.

Case XIV.—H. A. B——, male, aged twenty-seven; noisy, incoherent, violent, excitable, and destructive by day. Has been sleeping well for the past ten nights on tr. hyos., 3 ij.; chloral, gr. x., one dose nightly. Prescribed H. H., gr. $\frac{1}{10\frac{1}{2}}$ t.i.d. et ad nocte. Fifth day: Has thus far slept as well as usual, but by day has been unusually disturbed; pupils slightly dilated, face flushed. Day doses increased to gr. $\frac{1}{9\frac{1}{6}}$ t.i.d. Eleventh day: Does not sleep as well; quieter and confused by day; pupils quite dilated, throat and mouth dry, extremities cold, pulse 78 to 70. Night doses also increased to gr. $\frac{1}{9\frac{1}{6}}$ b.i.n. Nineteenth day: Pulse has varied nightly since last note from 106 to 60. Has slept quite well, but is noisier by day; this afternoon and evening unusually excited. 8.30 P.M., is given H. H., gr. $\frac{1}{9\frac{1}{6}}$, hypodermatically; pulse 96. 8.55 P.M., pulse 120, pupils widely dilated, face flushed. 9.40 P.M., hypodermatic of gr. $\frac{1}{9\frac{1}{6}}$ repeated; pulse 104. 10 P.M., very noisy, raving, delirious; could not get at pulse to feel it. In a few minutes became quiet and went to sleep. Slept lightly one hour. Twentieth day: 1 A.M., took $\frac{1}{9\frac{1}{6}}$ by mouth and slept three hours. Quieter to-day; pulse 102 and feeble; pupils greatly dilated. Twenty-second day: Night doses increased to gr. $\frac{1}{7\frac{1}{2}}$ b.i.n. Twenty-fourth day: Sleeps but about three hours nightly with the two doses; pulse very variable, 56 to 102; is much more disturbed and noisy by day; seems also more erotic; masturbates much. Twenty fifth day: Slept but one hour on the two doses. Pulse feeble and rapid, eyes suffused, pupils large, muscular tremor marked, seems utterly dazed, wild and haggard, is delirious. The H. H. is now discon-

tinued and patient put upon Brown-Séquard's mixture t.i.d., and two doses nightly of tr. hyos. and chloral. Thirty-fifth day: Has been sleeping two to four hours nightly since last note. Patient is quieter and his appetite, which had become much impaired under H. H. treatment, is restored.

CASE XV.—S. H. B——, female, aged forty; noisy, incoherent, destructive, filthy. For the past ten nights has slept two to three hours with tr. hyos., 3 ij.; chloral, gr. v., one dose nightly. Very noisy when awake. Put on H. H., gr. $\frac{1}{60}$, at night. Ninth day: Has been sleeping two to five hours on H. H.; dose now increased to gr. $\frac{1}{30}$. Nineteenth day: Has been sleeping four to five hours every night; noisy when awake. Dose now increased to gr. $\frac{1}{45}$, which she took two or three nights, sleeping well. Since then (for three weeks) to present writing has been sleeping well all night without medicine; is quieter by day. The constitutional symptoms in her were very slight. It always required from half an hour to one hour for the H. H. to take effect.

CASE XVI.—J. A——, female, aged twenty-three; very noisy, incoherent, in constant motion; is exhausting. Is an idiot with acute mania. Is reported to have been sleepless for several nights previous to admission. First night in hospital was noisy all night; was then put on H. H., gr. $\frac{1}{60}$. Tenth day: Has slept from three to five hours every night with this dose; dose now increased to gr. $\frac{1}{30}$. Is growing stronger bodily; sitting up; pupils dilated and face flushed some days. For nine nights following was given this dose; sleeping well at first, but gradually sleeping less. Nineteenth: Dose increased to gr. $\frac{1}{60}$. Was sleepless for two nights, but, after that, slept so well for a week with this dose and improved so much, that it could be discontinued. She now sleeps without medicine.

CASE XVII.—M. E. R——, female, aged sixty. This case is the most instructive, and we report it in full. Her mania is but of few days' duration. Admitted August 19th. She has refused food and medicine, does so now, and permits no physical examination. Is extremely obscene, profane, violent, and destructive. Seems to be exhausting, and prognosis of death in a few hours is made. Is put in a camisole in bed. At 3.55 P.M., H. H., gr. $\frac{1}{60}$, is forcibly injected into her leg; 4.25, still furiously maniacal. A second gr. $\frac{1}{60}$ is now injected; 4.30, is quieter, but too resistant to take pulse. Pupils dilated; 4.35, pulse 88. Still tries to be noisy, but cannot articulate; to resist, but lacks the power. 4.40, pulse 88, respiration 16; is sleeping quietly. 7 P.M., awoke stupid and weak; 7.30, took a milk-punch. At 9 awake, but quiet. 10.30, took half a milk-punch, which contained H. H., gr. $\frac{1}{60}$, and also three-quarters of a glassful of milk. Was sleepless and noisy at times the rest of the night.

August 20th.—Very noisy most of the forenoon; will not allow pulse to be felt. 11.55 A.M., H. H., gr. $\frac{1}{30}$, forcibly injected hypodermatically. 12.10 P.M., got out of bed; staggered like a drunken person; talked thickly; voice hoarse; less noisy, but impossible to get at pulse; drank a little milk. 12.15 o'clock: perfectly quiet in bed; drowsy; took a pint of milk. 12.20 o'clock, is dozing; pulse 96. 2.25 o'clock, P.M., awoke and took nourishment; is quiet and stupid. 2.40 o'clock, went to sleep again. 9 o'clock, P.M., has been stupid and quiet all the afternoon and evening; has taken milk and beef extract. 10.30 o'clock, P.M., took a milk punch containing H. H., gr. $\frac{1}{60}$. Sleepless all night, and noisy after 3 o'clock; took milk at intervals.

August 21st.—5.35 P.M.: Has slept about three hours during the day, but has been extremely noisy the entire afternoon; impossible to induce her to take a single swallow of food or drink; H. H., gr. $\frac{1}{30}$, injected hypodermatically forcibly. 5.50 o'clock, quiet; beginning to doze; refuses nourishment. 6 o'clock, asleep; continued to sleep until 12.20 A.M. 1 A.M., took punch containing H. H., gr. $\frac{1}{60}$, and nourishment at different times afterward; slept no more; very noisy between 1 o'clock and 3 o'clock.

August 22d.—8 A.M.: Went to sleep after taking a pint of farina and milk. 11 o'clock, A.M., is awake and quiet, except when people enter her room, when she becomes furious. 5 o'clock, P.M., H. H., gr. $\frac{1}{30}$, injected hypodermatically. Has been extremely noisy all the afternoon. 5.15 o'clock, quiet, but not asleep. Took three eggs, a glass of milk, and 3 ij. meat extract, then went to sleep. 5.40 o'clock, sound asleep.

August 23d.—12.20 P.M.: Slept last night until 2.30 o'clock this morning. Very noisy after that until now, but took a punch containing H. H., gr. $\frac{1}{60}$, which had no effect; H. H., gr. $\frac{1}{60}$ injected hypodermatically. 1.10 o'clock P.M., stupid, but still awake; quiet; takes liberally raw eggs, milk, whiskey, and meat extract (one pint altogether). 1.25 o'clock, P.M., sound asleep. 2.25 o'clock, P.M., awake and noisy as ever. 5.20 o'clock, P.M., continues to be noisy, is furious whenever any one enters her room; a second hypodermatic injection of H. H., gr. $\frac{1}{60}$, is given. 5.35 o'clock, went to sleep. 7 o'clock, P.M., woke up; is well fed; went to sleep again.

August 24th.—Continued to sleep until 10.40 o'clock, P.M., last night; very noisy after that time. 12 o'clock, noon, has been as violent, profane, and obscene as possible, up to this hour; H. H., gr. $\frac{1}{45}$, is now given hypodermatically. 12.10 o'clock, P.M., asleep; is easily roused, and takes a quantity of food; pulse 80, tongue and lips covered with sordes. 4 o'clock, P.M., awoke and is fed. 5.40 o'clock, P.M., noisy for the last hour. H. H., gr. $\frac{1}{45}$, injected hypodermatically; went to sleep in a few minutes; slept for three hours, when she awoke and became exceedingly noisy; refused nourishment.

August 25th.—11.30 A.M.: Has been exceedingly noisy until this time; H. H., gr. $\frac{1}{45}$, injected hypodermatically, became quieter at 12 o'clock; took some nourishment but vomited part of it. 5.30 P.M., very noisy; second hypodermatic of H. H., $\frac{1}{45}$ gr., given. 6.10 P.M., has taken considerable nourishment to-day, is now asleep. 9 P.M., is still asleep.

August 26th.—Did not sleep after 10.30 P.M., noisy all night; took some milk but did not retain it, vomited several times; very quiet this morning; has taken nourishment voluntarily. 5 P.M., quite noisy this afternoon, H. H., gr. $\frac{1}{45}$, given hypodermatically; took a pint of liquid nourishment and went to sleep shortly after 6 o'clock. 9 P.M., still sleeping.

August 27th.—Slept until 12.45 o'clock this A.M., sleepless afterward; drank three glasses of milk without compulsion; vomited a little at 6 A.M.; quiet this morning and somewhat rational, but toward noon became noisy, when she was given H. H., gr. $\frac{1}{60}$, hypodermatically; slept about four hours. 7.30 P.M., a second hypodermatic injection of H. H., gr. $\frac{1}{60}$, given, went to sleep in fifteen minutes; has had some diarrhœa to-day. 9 P.M., sleeping.

August 28th.—Slept until 12.15 o'clock this morning, and again from 1 o'clock until 4.30 A.M.; took a fair amount of nourishment this forenoon; bowels loose. 11.30 A.M., very noisy; H. H., gr. $\frac{1}{60}$, given hypodermatically; slept about three hours. 5.30 P.M., second hypodermatic solution H. H., gr. $\frac{1}{60}$, given. Went to sleep at 6.30 P.M., and slept the greater portion of the night.

September 5th.—Has not been given any medicine since; has slept fairly well every night, and takes plenty of nourishment; is up and dressed, and goes out of doors; is quiet and pleasant, talks rationally of home and home-affairs; is neither profane nor obscene, and appears to be rapidly convalescing; the diarrhœa and vomiting ceased with the hypodermatics.

CASE XVIII.—P. H——, female, aged twenty-eight; noisy, violent, filthy, destructive, erotic, obscene, puerperal. Was sleepless and noisy nearly every night for a week preceding the prescription of H. H. Was given H. H., gr. $\frac{1}{60}$, for three nights without effect; the dose was increased to gr. $\frac{1}{30}$ for six nights; became more

noisy, and with the exception of two hours occcasionally, was sleepless each night. The dose was increased to gr. $\frac{1}{4\,8}$ for ten nights, but was as noisy and sleepless as before. The constitutional symptoms were now quite marked: pupils were dilated, face flushed, there was anorexia and diarrhœa. Was now put on two doses nightly of pulv. Dover, gr. x., for six nights, the H. H. being altogether discontinued. This checked the diarrhœa, and she slept well each night. Since then has slept fairly without any medicine.

Case XIX.—E. M. B——, female, aged twenty-two; noisy, destructive, violent, garrulous, incoherent, puerperal. First night after admission was sleepless and noisy all night. Was given H. H., gr. $\frac{1}{9\,0}$, for the three following nights, inducing each night from four to five hours' sleep; dose increased to gr. $\frac{1}{7\,2}$ for nine succeeding nights, during which she slept a little better than before. For five nights following this she took gr. $\frac{1}{6\,0}$, but slept only two to three hours nightly, and is more noisy day and night than usual; pupils dilated; face flushed. The H. H. is discontinued, and for the past two weeks has been sleeping four to six hours nightly on tr. hyos., 3 ij.; chloral, gr. x.

Case XX.—E. J. E——, female, aged twenty-six; sleepless, violent, noisy, destructive, profane, obscene, erotic, puerperal. Has usually slept sufficiently on tr. hyos., 3 ij.; chloral, gr. x. Has taken thus far Brown-Séquard's mixt., 3 j. t.i.d. All this is discontinued and patient is put upon H. H., gr. $\frac{1}{9\,6}$ t.i.d., et ad nocte. For five nights she slept five to six hours nightly on one dose; became much more excited and noisy by day; pupils greatly dilated, face flushed and hot, voice hoarse; pulse rapid and weak. Day doses of H. H. discontinued. H. H., gr. $\frac{1}{7\,2}$, given for nine succeeding nights, and gr. $\frac{1}{6\,0}$ for five nights after, causing some four to five hours sleep nightly, but is more noisy, destructive, excitable, and violent than before taking the remedy. H. H. is discontinued; has refused other hypnotics since, but sleeps four to five hours nightly as before. It is now ten days since H. H. was given. Under Brown-Séquard's mixt., 3 j. t.i.d., much of her excitement has abated in this time.

Case XXI.—B. J. B——, male, aged twenty-two; maniacal excitement in the course of imbecility; very noisy by day; has slept fairly of late with tr. hyos., 3 ij. Took for six days H. H., gr. $\frac{1}{1\,9\,2}$ t.i.d. et ad nocte, without special change, when day doses were increased to gr. $\frac{1}{9\,6}$ t.i.d. Tenth day: Has slept but little for several days; pupils much dilated, skin cold, pulse slow, but would not allow it to be counted, face flushed; unusually noisy and destructive to day; whistling and laughing much. Night doses of H. H. were gradually increased now until the fourteenth day, when he took gr. $\frac{1}{3\,6}$, but his sleep became less. At night his pulse would vary from 100 to 64. Twenty-second day: Has taken gr. $\frac{1}{7\,2}$ twice nightly since the fifteenth, generally sleeping but three hours. Is quieter now by day, but confused, and undresses himself, seeming to suffer from sensations of heat of skin. Got into the sink and started the cold water running over him. Pupils largely dilated, conjunctiva injected, and face flushed. Seems to have constant erections of penis which he had not had before. Twenty-seventh day: This symptom having become much aggravated, and his sleep growing less, the H. H. is now discontinued altogether. Had began to tear his clothes off. Is prescribed now tr. hyos., 3 ij.; chloral, gr. x., with which he has slept four to five hours nightly for some time. Is again quieter by day.

Recurrent Mania.—Case XXII.—J. S——, male, aged forty-seven. His period of excitement has just commenced. Ordered H. H., gr. $\frac{1}{9\,5}$ t.i.d. On the first day and night was very noisy, incoherent, violent, and treacherous. Second day: Slept all night. Pupils dilated, pulse 70, fauces dry; very much quieter. Fourteenth (time of present writing): Has slept well every night. Has had no further return of excitement. His attacks have always heretofore lasted three to four weeks in spite of all treatment employed.

Chronic Mania.—Case XXIII.—A. B——, male, aged fifty-three; destructive, violent, filthy, at times somewhat noisy. For several nights prior to taking H. H. had slept fairly well after taking chloral, gr. xv.; tr. hyos., 3 ij. Prescribed H. H., gr. $\frac{1}{9\,6}$ ad nocte, for twenty-nine nights. During this period he usually slept from three to six hours at night. There was some increase in his excitement by day, but no marked constitutional symptoms were noticeable except dryness of throat and dilatation of the pupils.

Case XXIV.—C. J——, female, aged forty-nine; filthy, obscene, profane, mischievous, violent, and treacherous. Is often sleepless and noisy at night. Prescribed H. H., gr. $\frac{1}{9\,6}$ ad nocte, for five nights, on the sixth night the dose was increased to gr. $\frac{1}{7\,2}$. Took this almost nightly for a month and usually obtained from six to eight hours of sleep. Would sleep some nights without medicine. With the exception of dilatation of the pupils, at no time has she exhibited any constitutional effects.

Case XXV.—H. N——, female, aged sixty-five; nervous, excitable, and sleepless. For ten nights previous to taking H. H. was sleepless each night, though she took chloral, gr. v.; tr. hyos., 3 j. Took H.H., gr. $\frac{1}{9\,6}$, for eight nights, producing from four to six hours of sleep each night. Dose was now increased to gr. $\frac{1}{7\,2}$, upon which she usually slept about six hours. On the eighteenth day the dose was increased to gr. $\frac{1}{6\,0}$. Pupils were now dilated, tongue and fauces dry, face flushed, but pulse normal. Not sleeping well, morph. sulph., gr. $\frac{1}{4}$, was added to H. H., gr. $\frac{1}{6\,0}$, for the first three or four nights; slept about four hours on this. After that time till the present (eighteen days) has slept from six to eight hours each night on same.

Case XXVI.—L. V. S——, female, aged seventy-five; filthy, violent, and noisy. Previous to being put on H. H. she usually obtained from three to six hours' sleep every other night on various hypnotics. H. H., gr. $\frac{1}{9\,6}$, was taken for eight nights, causing an average of six hours of sleep nightly. The dose of H. H. was now increased to gr. $\frac{1}{7\,2}$, which she took for eleven nights. At first slept well on this, but the amount of sleep being afterward reduced to three hours, H. H., gr. $\frac{1}{4\,8}$, was prescribed. Pupils have been dilated for several days, throat is dry; complains that she is losing her voice and says that somebody has been giving her ratsbane. The first dose of H. H., gr. $\frac{1}{4\,8}$, caused her to sleep all night, but the amount of sleep obtained being again reduced to three hours, H. H., gr. $\frac{1}{3\,6}$, was ordered on the twenty-sixth night, which she took for five nights, obtaining an average of five hours of sleep nightly. The amount of sleep now again diminishing, H. H. was discontinued and chloral, gr. x.; tr. hyos., 3 ij., substituted, which, to the present writing (ten days), has produced nightly from four to six hours of sleep.

Case XXVII.—E. J. D——, female, aged fifty-one; exceedingly noisy, violent, filthy, and destructive; is excited night and day; is in almost constant motion, stamping and gesticulating. For ten days previous to taking H. H. took nightly chloral, gr. x.; tr. hyos., 3 ij., which produced occasionally one or two hours of sleep. H. H., gr. $\frac{1}{9\,6}$, was now prescribed b.i.n. for nine days. The first night she slept but two hours. The succeeding two nights she averaged six hours of sleep. The fifth night she slept only two hours; the sixth night not any. On the tenth night H. H., gr. $\frac{1}{7\,2}$ b.i.n., was ordered. On the fourteenth the dose of H. H. was increased to gr. $\frac{1}{6\,0}$. On the seventeenth to gr. $\frac{1}{4\,8}$. On the twenty-fourth to gr. $\frac{1}{3\,6}$, and on the thirty-first to gr. $\frac{1}{2\,4}$. Following each increase in the dose of H. H. (b.i.n.), for a night or two there would be a slightly increased amount of sleep, but after two or three nights she would be so tolerant of the increased doses that they would have no hypnotic effect. Constitutional symptoms appeared about the tenth day, and from that time till the

medicine was discontinued her pupils were dilated, her skin dry and hot; her excitement seemed to be increased by the H. H. On the twenty-sixth day two doses of H. H., gr. $\frac{1}{60}$, were administered hypodermatically, twenty minutes apart. Pulse at time of first injection was 86; twenty-five minutes after the second it was 112, and she was quiet and drowsy. Ten minutes later pulse was 104, and she was asleep; ten minutes later pulse was 94, and respirations were 18; was still asleep; slept for about two hours. As she was deriving no benefit from H. H., its use was discontinued on the thirty-third day, and chloral, gr. x.; potass. bromide, gr. xv., substituted. Has derived sufficient sleep from this dose for several nights past.

Dementia.—Case XXVIII.—O. M. L——, male, aged sixty-six; quiet, pupils contracted, pain and fulness in the head, marked paralysis agitans, senile dementia. Ordered H. H., gr. $\frac{1}{60}$ t.i.d. Third day: Says the pains in his head are gone. They had been there for a year. Seventh day: Pupils dilated; says he feels better. The paralysis agitans is less marked than for many months.

Case XXIX.—A. M——, male, aged sixty-nine; senile dementia. Talks through imaginary telephones in loud voice; very noisy by day, but sleeps fairly at night. Put on H. H., gr. $\frac{1}{60}$ t.i.d. Fourth day: Pupils dilated; sleepless and noisy for two nights. Began to have diarrhœa to-day: the latter growing worse, the H. H. was discontinued the next day, after which it ceased. Seventh day: Put on H. H., gr. $\frac{1}{75}$ t.i.d., as he is quite turbulent and boisterous, and also the same dose at night. The medicine is put in his food, because refused. Tenth day: Is sleeping well; is quieter by day; pupils dilated; throat dry; some anorexia. H. H. was discontinued a few days afterward because of failing appetite.

Case XXX.—J. P——, female, aged twenty-five; noisy and sleepless at night for the past week. Tr. hyos., 3 ij.; chloral, gr. v., has had little effect. Took H. H., gr. $\frac{1}{75}$, for eight nights, sleeping the first few nights between three and four hours, but longer afterward. The following six nights slept well all night with gr. $\frac{1}{60}$. Generally sleep would come on in from one to two hours after taking the dose. On the fourteenth day the H. H. was discontinued. Thus far had moderate dilatation of pupils, some thirst, and had developed a tendency to tear off her clothes and be nude. Patient was too demented to say whether the skin was irritated or not. Twenty-fourth day, has been sleeping well on tr. hyos., 3 ij.; chloral, gr. x. Does not tear clothes as she did.

Case XXXI.—M. A. J——, female, aged twenty-two; exceedingly filthy, destructive, violent, obscene, and noisy. For ten nights previous to taking H. H. was noisy much of the night, or all night at times. Was given H. H. for two weeks, beginning with gr. $\frac{1}{60}$ and increasing to gr. $\frac{1}{48}$, and slept on an average five hours nightly. Moderate dilatation of the pupils was produced, but no other constitutional symptoms.

Case XXXII.—E. H——, female, aged forty-seven; quiet, idle, and stupid by day; sleepless and out of bed all night. For the past ten nights has taken tr. hyos., 3 ij., without effect. Was now put on H. H., gr. $\frac{1}{60}$, for twelve nights, sleeping the first ten of these nights very well all night, but the last two nights wakeful as usual. The dose was now increased to gr. $\frac{1}{75}$ for six nights, with which she slept from two to five hours nightly. Nineteenth day: Dose increased to gr. $\frac{1}{48}$, with which she slept five to six hours nightly for the following ten nights. On the twenty-first day of her taking H. H. complained of the increasing constitutional symptoms. Pupils widely dilated; pulse, 60; throat and mouth dry; dozes in the day-time; bowels relaxed and move three to four times daily. Thirty-second day: The last few nights she slept but two hours nightly on gr. $\frac{1}{48}$. The looseness of bowels continues; gait unsteady; anorexia, and other constitutional effects marked. Is evidently sleeping less with increase of dose and long continuance of the drug. Forty-fifth day: Since the last note has slept from four to seven hours nightly on pot. brom., gr. xv.; chloral, gr. x. This case illustrated particularly well the long time required for the remedy to take effect in some cases when given by the mouth. She invariably took the dose at 10 P.M., and as invariably went to sleep at 11.30 or 12 P.M., thus requiring one and a half to two hours to cause sleep.

General Paresis.—Case XXXIII.—F. H——, male, aged twenty-two; very restless, excited, *délires des grandeurs*, noisy, destructive. Has usually slept well after taking chloral, gr. xx.; tr. hyos., 3 ij. Prescribed H. H., gr. $\frac{1}{150}$ t.i.d. et ad nocte. For three nights slept well, but continued to be excited and noisy by day; pupils are dilated, face is slightly flushed. On the fourth the night dose was increased to gr. $\frac{1}{60}$, and on the seventh the day doses increased to gr. $\frac{1}{60}$; on the eleventh day the day doses were increased to gr. $\frac{1}{75}$. Has been extremely noisy of late during the day. On the thirteenth gr. $\frac{1}{75}$ ordered b.i.n. On the nineteenth was very wild, noisy, and excitable; H. H., gr. $\frac{1}{60}$, was given hypodermatically at 2.55 P.M.; at 3 P.M. pulse was 96; at 3.05 P.M., 100; at 3.10 P.M., 100; pupils very wide; 3.20 P.M., pulse 100; 3.25, a second hypodermatic injection of gr. $\frac{1}{60}$ was given; pulse, 102; 3.30 P.M., 104; 3.35 P.M., 124, leaping suddenly twenty beats; now commenced feeling "faint and sick;" face flushed; eyes suffused; pupils very large; noisy, garrulous, excited; 3.40, pulse 110. Says he wants a drink; lips, tongue, and throat parched and dry; says he feels "as weak as a cat." 3.45 P.M., pulse, 116. Commenced destroying his bed. 4.05 P.M., pulse, 104; is not asleep, but is quiet, sitting up. 4.45 P.M., took gr. $\frac{1}{75}$ by mouth; 5 P.M., pupils very greatly dilated; articulation difficult; is hoarse; pulse, 96. 9 P.M., is sleeping, but readily roused; pulse, 69. Was awake at 10 P.M.; pulse, 88. Took gr. $\frac{1}{75}$, and slept for about an hour. At 1 A.M. took another gr. $\frac{1}{75}$, and slept two hours. Pulse varied during the night from 88 to 80. The next day was very noisy and excited. The following night the hypodermatic injections and night doses were repeated, producing not more than one hour of sleep. Twenty-fifth day: Doses at night increased to gr. $\frac{1}{60}$. For several days has denuded himself, and has had apparently a sensation of heat and irritation of the skin; scratches chest and limbs much. Twenty-seventh day: H. H. was discontinued altogether. Patient's excitement has been increased by it. Is now delirious, maniacal, and almost uncontrollable. Brown-Séquard's mixture ordered during the day, and chloral and tr. hyos. at night. For the past five nights, to present writing, has slept all night, and is quieter by day.

Case XXXIV.—C. P——, male, aged forty-six; excited, restless, *délires des grandeurs*. Sleeping well on chloral, gr. x.; tr. hyos., 3 ij. Ordered H. H., gr. $\frac{1}{60}$, b.i.n., for sixteen nights. Did not sleep any the first night. Had nausea and vomiting the latter part of the second night. Second to fifteenth nights inclusive, slept from three to five hours. Sixteenth, slept but one hour after the second dose. H. H. now discontinued, and chloral, gr. xv.; tr. hyos., 3 ij., ordered. Pupils slightly dilated, but no other constitutional effects of H. H.

Case XXXV.—H. G. P——, male, aged forty; in stage of maniacal excitement. Has slept from three to five hours on chloral, gr. x.; morph. sulph., gr. $\frac{1}{8}$. Prescribed H. H., gr. $\frac{1}{60}$ b.i.n., for five nights and gr. $\frac{1}{75}$ b.i.n., for four nights. Obtained nightly from two to four hours of sleep. During the last three days had attacks of vomiting, and a diarrhœa, to which he is subject, coming on, the H. H. was discontinued and former hypnotic returned to. No apparent constitutional effects except dilatation of the pupils.

Case XXXVI.—J. F. E——, male, aged forty-three; delusions of exaltation; some restlessness. Has, as a rule, slept from five to seven hours at night after taking chloral, gr. v.; tr. hyos., 3 ij. Prescribed H. H., gr. $\frac{1}{60}$ ad nocte, for twenty nights. Slept about the same number

of hours each night as he had been accustomed to after taking chloral and hyos. Pupils have been dilated; pulse has varied at night from 80 to 64. No other constitutional symptoms have been exhibited.

EPILEPSY.—We have also given H. H. to twelve epileptics, six females and six males, whose seizures mostly occurred from daily to one in two weeks. Began with gr. $\frac{1}{60}$ t.i.d., and increased the dose in a few days to gr. $\frac{1}{15}$ t.i.d. In the females H. H. was discontinued after two weeks, and in the males after four weeks, because of anorexia and nausea, loss of accommodation, dilatation of pupils, flushing of face, dryness of throat, and general languor and malaise produced by the drug.

If anything, the seizures are made more frequent. We were led to try it in epilepsy by the one benefited case of Edlessen, and by the laudation of its isomeride, atropine, by Trousseau, and by the praise of its other isomeride, hyoscyamine, in the West Riding Reports, as remedies in this disorder.

CONCLUSIONS.—We had hoped to be able to add hyoscine to our hypnotics, because its tastelessness would have made it especially valuable. That, however, is no virtue in the remedy, because of its uncertainty of action and the length of time it requires to produce sleep (sometimes one to two hours) when given by the mouth.

Hyoscine is not, in our opinion, a real hypnotic, such as chloral, opium, and the bromides, although it disposes to sleep by causing muscular relaxation and a feeling of weariness, and does, in large doses, produce stupor.

The sleep apparently caused by it is of short duration, and is easily broken.

We think it should never be given by the mouth with the view of producing sleep. We shall use it hereafter only hypodermatically.

Its continued use is not advisable.

Constitutional effects appear in some cases sooner and more severely than in others.

The respirations are made shallower but not diminished in number (any more than by natural sleep).

The pulse is often considerably reduced, sometimes increased in frequency, and usually made very variable. It may reduce or increase arterial tension. The face usually flushes, and the extremities become cold.

There is dilatation of the pupils and loss of accommodation. There is, further, dryness of the throat and mouth, dizziness, and in many cases, anorexia and nausea, in some cases vomiting and diarrhœa.

In a few cases there is sensation of heat and itching of the skin.

The severer effects are muscular tremor, unsteadiness of gait, delirium, and stupor.

It seems in one or two cases to have increased erotism.

As to its use in insanity, we tested it chiefly, as before stated, in these cases for its value as a hypnotic. We think, as a rule, it increased excitement by continued use. It made our melancholiacs worse. It was no improvement in chronic mania, dementia, and general paresis, on chloral and hyoscyamus. It was of no value in epilepsy, but may not have been continued sufficiently long. It may prove of value in some cases of acute mania if given subcutaneously; but we doubt if it will supersede hyoscyamine.

POUGHKEEPSIE, N. Y., September 1, 1885.

OXYGEN, it seems, can, after all, be brought to the liquid state, under such easy conditions that the experiment is likely to become an ordinary laboratory one, in consequence of a recent discovery by M. L. Cailletet. He has found that formene, when slightly condensed and cooled in boiling ethylene under atmospheric pressure, is resolved into an extremely volatile colorless fluid, which, while again passing to the gaseous form, produces cold sufficient to cause the liquefaction of oxygen immediately.

OBSCURE AND EARLY SYMPTOMS IN GENERAL PARESIS.

CASE, WITH REMARKS ON THE DIAGNOSIS, CAUSES, AND EARLY TREATMENT OF THE DISEASE.[1]

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EARLY in July, 1879, I was requested to visit a man named Jacob K——, for the purpose of rendering my aid in placing him in an asylum for the insane. His wife said to me, that although his conversation and actions were such that the members of his own family had no doubt regarding the deranged condition of his mind, many casual acquaintances who saw him, including some practitioners of medicine, failed to observe any evidences of insanity.

On visiting the patient two important sets of symptoms were observed: *first*, certain peculiarities in his articulation, or rather in his whole manner of speaking, in his expression, and in his movements, especially the movement of his tongue and his locomotion; and *secondly*, certain defects of the memory and of the intelligence which were evidently inconsistent with the theory that these defects were natural, for he had been an active and successful man of business, and, moreover, his manner and expression were quite different from what are observed in cases of original defect.

None of these symptoms were strongly marked, and at times none of them would be noticed by ordinary observers. Indeed, the members of his own family do not appear to have noticed his physical defects until their attention had been sharply drawn to the subject by close questioning.

The symptoms observed were, more specifically, as follows, viz.:

There was a certain peculiarity in his *articulation* which it is difficult to describe, as it was manifested only in a slight degree at any time, and at times was hardly observable, but which when its existence can be made out, is the earliest and one of the most important of the physical symptoms of a grave and fatal disease of the nervous system. This peculiarity in articulation did not consist in stammering, nor an inability to enunciate difficult combinations of consonants, nor even in that slight degree of stammering which may be characterized as a slowness or hesitation in the articulation of the whole or part of a sentence, as though stammering were imminent, but avoided by especial painstaking at difficult points; but rather by a sort of drawl and lack of clearness in the articulation of difficult words and phrases, of the existence of which the speaker did not seem to be conscious. When his attention was aroused, the defect in articulation was diminished.

The *tongue*, when protruded, lacked somewhat in firmness and steadiness, as though the muscles were enfeebled, or not well under the control of the will, and at times slight fibrillary tremors at the edges were observed.

His manner of walking lacked in firmness and decision. He did not stumble nor stagger, but walked wide, and as though the muscles of the legs were rather slow in receiving and obeying the mandates of the will.

No inequality nor irregularity of the *pupils* was observed, but they seemed to be rather large, and rather slow in responding to the stimulus of light.

When questioned he gave revelant, rational, and apparently correct answers; at all events, this was the case when he was questioned by strangers, and when short replies only were required. In fact, under these circumstances, he appeared to converse naturally enough, and to give no especial evidence of mental impairment.

But when the conversation was prolonged, and carried on in a familiar way; and when he was allowed to converse in accordance with his own impulses, certain marked peculiarities were observed. He would talk of

[1] Read before the Yorkville Medical Association.

trivial matters, as though they were of great importance, and yet in a childish way. Indeed, a lack of intellectual ability was then observed in both the matter and manner of his conversation, which was not at all in accordance with what was to be expected of a man of his appearance, and who had been a successful business man. Again, not only were the subject-matter and manner of his conversation childish, but he would repeat the same unimportant statements many times within the duration of a short conversation of an hour, without seeming to realize or to remember that he was thus repeating.

Here, then, we have a patient presenting certain not very well-marked mental and physical symptoms, who is thought by his relatives to be of unsound mind, but who is considered as quite sane by many of his casual acquaintances. His relatives claim that he sometimes manifests much more convincing evidences of insanity; but, inasmuch as they wish to place him in an asylum for the insane, how can the examining physician be sure that they have no motives of interest to place him there, and that their statements are reliable? If he depends on their statements as the basis of his opinion, he may render himself liable to a suit at law for assisting in the incarceration of a sane man.

It is important, then, to inquire whether such obscure symptoms, as have been enumerated above, are sufficient as a basis for the diagnosis of mental derangement; and if so, to what particular category this derangement belongs.

The mental symptoms, in so far as their character can be expressed in language, denote general enfeeblement and nothing more. He comprehends rather slowly; he is rather slow in giving expression to his ideas; he talks about unimportant, childish matters, or about serious matters in a childish way, as though he did not appreciate their importance; he forgets the subject-matter of a short conversation to such an extent that he repeats the same story many times during his conversation, and, moreover, the whole manner of his conversation and expression are such as to convince the observer that the will-power is weak. He finds that the patient is easily influenced by the will of others, notwithstanding the fact that at the first he sometimes appears to be particularly obstinate in regard to matters which may be in question. The physical symptoms are such as denote a general impairment of nervous energy.

What, now, do all these symptoms mean, for it is at least evident that the patient is in an abnormal condition? In making out a differential diagnosis there are several possibilities which should be borne in mind and duly considered. It might be a case of acute alcoholism, or of chronic alcoholism, or of acute or consecutive dementia, or of epilepsy, or of cerebral tumor, cancer, or exostosis, or of partial recovery from cerebral hemorrhage, or of progressive muscular atrophy, or of labio-glosso-pharyngeal paralysis, or if neither of these, of that general impairment of the whole nervous system designated by the term general paresis.

The symptoms enumerated correspond very closely indeed with those manifested by certain cases of alcoholism, whether acute or chronic. But when it is found that the condition of the patient persists from the date of one visit to that of another, although the evidences of the recent imbibition of alcohol are wanting at each, the immediate effects of drunkenness may be excluded. So, too, the headache, the trembling, and the hallucinations peculiar to chronic alcoholism are wanting. Local brain affections, such as tumors, softening, hemorrhage, etc., may also be excluded, for the reason that in these cases the paralysis is unilateral, and has a tendency toward improvement, save perhaps in the later stages when death is impending or a considerable portion of the brain is involved. Epilepsy has its peculiar physiognomy, and the mental and physical symptoms are subject to marked variation in accordance with the time which has elapsed since a seizure. In dementia, whether acute or consecutive, the degree of stupidity is much greater than during the early stages of the disease in question; and, moreover, such defects as there may be in the articulation or locomotion in the simple dement evidently arise from the absence of an exercise of the will-power rather than from a lack of response to the volition which is actually exercised. In progressive muscular atrophy muscle after muscle is consecutively affected, and the intellect is rarely impaired otherwise than is likely to occur in connection with any disease attended by physical enfeeblement. In glosso-labio-pharyngeal paralysis there is indeed a general muscular enfeeblement corresponding very closely with that of the disease in question, but the mental symptoms are wanting.

There is one other disease, the leading symptoms of which perfectly correspond with those presented by the case under consideration. These are, in the concise language of Dagonet, *a paralysis which is general, incomplete, progressive, and accompanied by embarrassment of speech and mental disorder.* These are the essential symptoms of general paresis, or, as the disease is often termed, of general paralysis of the insane; and all these symptoms were manifested by the patient whose case has just been related, and may be considered as sufficient to establish the diagnosis, although the more characteristic of the mental symptoms peculiar to general paresis were entirely wanting, and although the physical symptoms were not very well marked. That is, we found a paralysis which affected all the muscles as far as could be made out, but most noticeably the muscles engaged in articulation and in locomotion. It should be borne in mind that if the whole nervous system be equally weakened in all its parts, the weakness will be most apparent in those movements which are the most delicate and require the nicest co-ordination. The movements required in the process of articulation are the most delicate of any of the muscular movements; and hence the weakening of nerve-power in general paresis may be noticed in a disorder of the muscular movements required in articulation sooner than in any other of the muscular movements, so the peculiar defect in the articulation may be diagnostic before other movements are noticeably impaired. We observed, also, that the paralysis was incomplete, was, in fact, slight; also that it remained the same from the date of one visit to another, so that if it did not noticeably progress within the space of a few days it was at least persistent. The mental disorder was also present.

In the great majority of cases of general paresis the mental disorder is characterized by exaggeration of ideas of a peculiar and extraordinary kind. The emotions are expansive, or at least are not depressed. And, moreover, the exaggerated ideas are entirely lacking in precision and definiteness. The patient will at one moment say he is worth a million dollars, and the next that he is worth a thousand millions; or now that he can run a mile in a minute, and immediately afterward that he can run a mile in a second. The essential element in the mental disorder is a weakening of the judgment and of the reasoning faculty; the patient is not able to compare one of his statements with another and to appreciate their discrepancy. Hence if his emotions are expansive he is very likely to express extravagant ideas, which are very indefinite and changeable in character, or he may only express entire satisfaction with his condition, prospects, and surroundings, when the facts would warrant only dissatisfaction. In some cases the emotions are depressed, but in these cases also the essential element—the weakening of the intellect—may be observed no less than in the others.

In most cases the testimony of friends and acquaintances may be safely relied upon to aid or substantiate the diagnosis. In the present instance this testimony was not necessary, and hence has been omitted in order that the essentials might be the more prominently brought into view.

As, however, a knowledge of the causes of the disease

and of the early symptoms is of especial importance to the general practitioner of medicine, a brief reference will now be made to some of these. After the symptoms of general paresis have become well marked, the disease may be of great interest to the pathologist, but is of little to the therapeutist; for in its advanced stages it marches surely and steadily to a fatal issue, notwithstanding any remedial measures that may be employed. If therapeutic or prophylactic measures are to be of any avail, it must be during the earlier stages, when the symptoms are most obscure and least likely to be observed.

Among the earlier symptoms of general paresis the following may be mentioned as the most common and the most important, viz.: The patient is observed to make extravagant or silly expenditures in opposition to his usual habit, or he neglects his business, while, at the same time, he takes unusual business risks, or he indulges in idle, impracticable schemes. In all this there is manifested at the same time an exaltation of feeling and a failure of the judgment very much like what is observed in many men when somewhat under the influence of alcoholic drinks. He may talk rather disconnectedly and more excitedly than is in accordance with his usual habit, or commit small thefts of articles he does not want, or which he could readily procure by purchase or simply by asking for them. An observer who has been led to suspect the possible existence of the disease may also be able to detect a slight embarrassment of the speech, this being the earliest of the physical symptoms, or even a noticeable carelessness in his chirography, or the omission of letters or words in his writings, or even that the movements of his extremities are not well co-ordinated. The mental symptoms, however, are almost always the earliest to show themselves, and the most prominent during the accession of the disease. Usually these premonitory and early symptoms are of considerable duration—a year, a year and a half, and, in some cases, a longer period of time.

At this point it will be well to enumerate some of the more prominent causes of the disease, since a consideration of these in connection with the early symptoms above mentioned will very materially aid in arriving at a proper diagnosis.

The following may be considered as types of the causes of general paresis, viz.: great business success, or the long-continued and ardent expectation of great success; great business losses, or long-continued anxiety about impending business losses; or alternating hopes and fears of success or failure; the intemperate use of alcoholic drinks; and excessive venery. It will be observed that all these causes act very powerfully on the emotions. Even the use of alcoholic drinks, although a physical cause, is a powerful excitant of the emotional part of our nature, and when efficient as a cause of general paresis may act in essentially the same way as do the other causes mentioned. Assuming the theory to be true that the whole nervous system is impaired in general paresis, it is still not at all impossible that long-continued emotional excitement may be at least one of the most important of the causes of this disease. At all events, the emotional element seems to be well marked among the mental causes.

So, then, when the practitioner of medicine observes the premonitory and early symptoms above enumerated in the case of any of his patrons, and more especially if he knows or ascertains that the individual in question has been subject to the causes which in many cases produce general paresis, he may have a reasonable hope of attaining curative results which are rarely if ever attained during the later stages of the disease. The fact that, contrary to the general experience, some cases of general paresis do sometimes apparently recover from what seemed to be a well-marked and hopeless stage of the disease, fairly warrants the hope that if the general practitioner of medicine were able to recognize the obscure and premonitory symptoms at an early day, he might in some cases save his patient from a calamity which otherwise would be practically inevitable.

The first step would evidently be to convince the patient and his friends that a grave disease was impending, and that prompt measures must be taken to prevent its accession. This task, which will usually be found a difficult one, will in most cases be best accomplished by an authoritative statement, unsupported by reasons. The simple statement of a professional opinion often carries weight which it would lose if accompanied by the reasons on which the opinion is founded; for the facts adduced may not be perceived at all by the non-professional mind, or if the existence of the facts be granted, the conclusions deduced may not be acknowledged. Indeed, it is not possible for a skilled observer to make scientific facts clear to the unlearned as he himself perceives them.

The first step in the treatment of the patient will evidently be to remove the causes which have been efficient in producing the mental and physical disturbance, or if this cannot be done, to diminish or counteract the causes as much as possible. If he is engaged in engrossing and prosperous business pursuits or speculations, he should either relinquish business entirely for a time, or should at least diminish or change his business to one of moderate dimensions, in which the risks are insignificant, and the profits moderate and regular. If he has been subject to great business losses and anxieties, it is better for him to save all he can from the wreck and retire from business entirely, rather than run the imminent risk of destroying himself in the vain endeavor to retrieve his failing fortunes. When the judgment becomes impaired, as it always is in these cases, the successful accomplishmen of difficult undertakings is entirely out of the question. There is great risk of failure, even in the pursuit of routine and hitherto prosperous occupations, and for this reason the interests of his family require that all his business operations be in some way placed under efficient supervision.

If the intemperate use of alcoholic stimulants or excessive venery be the cause of the commencing disease, these habits must be relinquished. In fine, all pursuits and habits that strongly affect the emotions should be given up.

The difficult task having been accomplished thus far, the remainder of the treatment will be comparatively easy. His physician should direct a life of quietude and a strict observance of hygienic rules. And inasmuch as the nervous system has become generally enfeebled, he should enjoin a plain, nutritious diet, and should prescribe such nerve-tonics as in his judgment seem to be required. The food tonics seem especially to be indicated in these cases. But while prescribing a nutritious diet, the quantity of food eaten should be moderate, and particular directions will be needed in this regard, inasmuch as these patients are inclined to eat voraciously. So, too, a constipated state of the bowels is to be guarded against, as well as all other departures from a state of health.

The importance of this subject to the general practitioner of medicine is manifest, when it is considered that the condition of general paretics is often practically hopeless by the time the disease has so far advanced as to attract the attention of friends and ordinary observers, and also that during the early period of the disease the paretic is likely to waste his property and impoverish his family.

In conclusion, it may be of interest to briefly recount the prodromata, early symptoms, and causes in the case which has served as a text for the preceding remarks.

The patient, who had been a prosperous wholesale butcher about four years ago, met with serious business reverses. He was obliged to give up the house in which he lived and which he owned. He was greatly annoyed by his misfortunes, and was unwilling any longer to as-

sociate with the men who had known him in his prosperity. His emotions were depressed instead of being expansive, as is usually the case in general paresis. He moved from New York to Brooklyn, and opened a retail butcher store. It was soon observed, however, that he did not conduct his business with his usual discretion. He systematically bought greater quantities of meat than he could sell, notwithstanding the fact that his wife and children made constant remonstrances against his indiscreet purchases, and the fact that so much meat spoiled on his hands as to more than counterbalance the profits. He lost his trade altogether in less than a year, and removed to Williamsburg, where he opened another store, with a competent head-man in charge. Business went on well for a time, but then he began to buy excessive quantities of stock as before. He also began to change his workmen in the store every two or three weeks, although he had formerly kept the same men in his employ for years together. He was also rude to his customers, and would sell them meat that had already spoiled. His memory, as well as his judgment, was observed to be at fault, for he would often send meat away without making any account of the purchase, unless closely watched by his daughter, who acted as bookkeeper.

He was eminently social in his habits when in a state of health. He had now become disinclined to seek society, and complained that his former associates treated him with neglect after he became unfortunate. When his children were merry and laughed, he would reproach them for their light-heartedness.

His business failed in Williamsburg as it had failed in Brooklyn. So in January last he removed to New York, and again established himself in business there, but his lack of judgment was still more marked than before. He hired a store utterly unfitted for his business, and mismanaged his business to a greater extent than ever.

His friends had never suspected that his mental faculties were impaired until this time, but now his conversation and conduct became such that the members of his own family were convinced of this fact, although casual acquaintances even then failed to recognize evidences of insanity.

It is proper at this point to mention one other probable cause of his disease, that is, the frequency of his devotions at the shrine of Venus. This was inferred from evidence which was considered reliable, but which it is unnecessary to state.

The issue of the case was as follows: An unfavorable prognosis was given. On July 19th he had a series of epileptiform convulsions, such as usually occur at some time during the progress of general paresis. An overloaded and constipated state of the bowels was probably the immediate cause of the convulsions. Croupous pneumonia, with general pulmonary congestion supervened, and the patient died on July 24th.

THE PATHOLOGICAL RESULTS OF MIMICKING PASSION.—Mme. Bernhardt has written an interesting letter in defense of the sincerity of actors and actresses, seeking to prove that many of them really enter into the spirit of their parts. She declares that Croizette, after the famous poisoning scene in "Le Sphinx," used to remain for some minutes pale and with chattering teeth, that Beaulevet always wept real tears when performing *King Lear*, and that Mounet-Sully had veritable hallucinations when acting the madness of *Orestes*. Sarah herself seems to outdo all these celebrated examples. She says: "I have never played *Phèdre* without fainting or spitting blood, and after the fourth tableau of 'Théodora,' in which I kill *Marcellus*, I am in such a nervous state that I return to my dressing-room sobbing. If I do not weep I have a hysterical fit, which is much more disagreeable to those around me and more dangerous for the vases and other things near at hand."

SPECIMEN OF DECIDUA,

ILLUSTRATING THE RESEMBLANCE BETWEEN THE PHYSIOLOGICAL DECIDUA OF PREGNANCY, AND THE MENSTRUAL OR PATHOLOGICAL DECIDUA OF VIRCHOW.

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THE interest in this specimen depends upon the fact that it may help to settle the question regarding the pathology and etiology of *desquamative dysmenorrhœa*, so called, which is still an open question among pathologists.

FIG. 1.

I obtained this specimen from a patient who aborted in the second month of pregnancy. It consists of the ovum and the exfoliated uterine mucous membrane or decidua. Fig. 1 shows the entire specimen, the membranes being laid open at *A*, to show the ovum *in situ*. The dotted line represents a portion of the membrane which was broken; and although the shreds of the broken portion were obtained, they could not be put together to show the complete cast. *B* shows the opening in the cast which represents the os internum.

Fig. 2 shows the membrane laid open and the ovum turned upward, the dotted line again indicating the lost portion of the membrane. The membrane looks exactly like the membrane which has been obtained in so-called membranous dysmenorrhœa, except that it is thicker at the point where the ovum was located.

The microscopical examination of this decidua shows that the membrane resembles the lining of the uterus, hypertrophied in all its elements. On the uterine surface of the membrane there was evidence that fatty degeneration had taken place, which evidently was the cause of the abortion and complete exfoliation of this membrane or decidua.

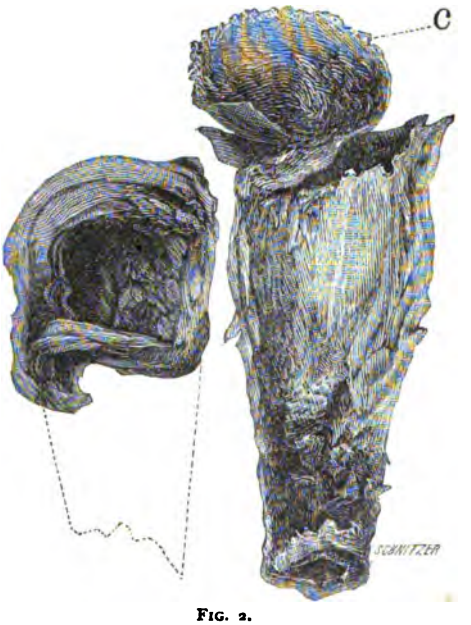

FIG. 2.

I presume it is rather rare that a specimen of this kind is obtained, from the fact that the decidua is not always thrown off in mass in abortions, at this early stage of pregnancy. It, therefore, gave me an unusual oppor-

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tunity for studying its resemblance to the pathological condition of menstruation referred to.

From this comparison I have received valuable evidence in favor of the views of Professors Simpson and Virchow, which I had already accepted as correct, namely, that the membrane exfoliated in this abnormal form of menstruation was the same in character as the normal decidua of utero-gestation. Taking this one fact regarding the decidua of pregnancy and the character of the decidua of a normal menstruation, it is more than probable that this menstrual decidua is the product of a heightened or excessive physiological process, which occurs out of time and out of season, a view which was entertained and taught by Sir James Simpson. It is also very valuable evidence against the theory entertained by others, that this membrane of menstruation is the product of an inflammation.

It appears, then, that in this disorder of menstruation the membrane repelled is a normal product of the uterus, which is pathological, because it occurs in the absence of pregnancy.

Now, let us take into consideration, at this point, the facts regarding menstruation as taught by Williams, of London, and Engleman, of this country: that the mucous membrane of the uterus attains its highest development at the period of menstruation, and that during menstruation it undergoes fatty degeneration, and is exfoliated either wholly or in part, that the exfoliation as it occurs in the healthy condition is in a granular or finely divided state; whereas in the pathological condition known as the membranous dysmenorrhœa, a fatty degeneration occurs in the deeper structures of the mucous membrane, and not in the whole of it; so that it is separated from the uterus by this stratum of fatty degeneration, and is thrown off in mass.

If, then, we draw our deductions from these facts, it would be proper to say, that in this affection of the uterus we have an excess of development of its mucous membranes, with a fatty degeneration limited to the deeper structures and not involving the entire membrane; which would account for it being thrown off entire, and not in the broken-down condition of normal menstruation.

If this, then, is the correct view of the subject, we can exclude inflammation as a factor in the production of this derangement of menstruation, and accept the fact that it is due to some abnormal excitation of the sexual organs, ovarian in all probability.

My clinical experience with some eight cases of membranous dysmenorrhœa would lead me to this conclusion as regards the etiology of the affection. In the majority of those where the cause has been noted I find that I have recorded that there was ovarian pain and tenderness in some of these cases, and in others it is recorded that there was no evidence of any inflammatory affection of the uterus itself.

To my friend, Dr. R. L. Dickinson, I am indebted for the excellent drawings of the specimens.

A Clairvoyant's Mistake.—The great skill in doctoring claimed by clairvoyants was fully illustrated recently by a circumstance which happened in Sharon. An estimable lady, who had been sick for a long time with a cancer, which good physicians knew to be incurable, was induced to try a clairvoyant doctor. The one selected was a certain "doctor" of North Easton. He professed to be able to tell the exact condition of the patient without seeing her, and sent medicine and a diagnosis each week. Every letter stated that she was getting better. A few days after her death he evolved the following, which was received by the family:

"North Easton, June 11th.

"Mrs. ——: I find you about the same. The acid in the blood has rather diminished. Use the medicine and bathe the same. Keep along with the poultice."

Clinical Department.

COCAINE IN HAY FEVER.

Dr. G. H. Simmons, of Lincoln, Neb., has used cocaine for the relief of hay fever with marked success in several instances. He relates the following case: "A farmer came into my office about three weeks ago, and, in a discouraged manner, asked me if there was nothing I could give him to relieve him of that terrible suffering and annoyance. His eyes were bloodshot, and his looks showed that he suffered all that he claimed to. Every little while he would have an attack of sneezing, which lasted three or four minutes, after which there would be profuse perspiration. He complained of great shortness of breath, exhaustion, and dimness of sight. There was intense itching of the nares, frontal headache, and severe pain in the eyes. It was the eye trouble that suggested cocaine to my mind, and as I had only a few minutes before been using a two per cent. solution in a case of cystitis (and with success), I without hesitancy concluded to try it in this case. I dropped two or three minims of the solution into each eye, and the effect was almost miraculous. I then with a camel-hair pencil applied a few drops to each nostril and well back into the posterior nares. The relief was immediate and complete. I gave my patient two drachms of the solution and instructed him how to use it. I saw him again in ten days, and his praises in favor of the remedy were very profuse. He had used it about three times a day, and thus kept off all symptoms of his annual trouble. It was the first time he said for years that he had been free from it during the latter part of July and the first two or three weeks of August. A second case in which the same remedy was used was hardly as severe, but the relief was just as complete and satisfactory. The patient is a married lady who has never found relief before without going either to the lakes or the mountains. In this case I used a four per cent. solution." Dr. Simmons has also employed cocaine in a five per cent. solution in equal parts of vaseline and castor-oil, as recommended by Dr. Gelston, of Limerick. He was successful, but nevertheless prefers the simple aqueous solution. He notes that Mr. John Watson, of London, has obtained relief in his own case by the use of tablets of cocaine inserted into each nostril.

THE TREATMENT OF TÆNIA BY CHLOROFORM.

Dr. W. H. Bennett, of Brooklyn, N. Y., sends us the following: As there has been some considerable discussion during the past year regarding the efficacy of chloroform in either killing or completely anæsthetizing tapeworm, so that its expulsion is rendered an easy matter by the simultaneous or after-administration of a brisk purgative, I beg to call attention to three cases where the drug mentioned was primarily successful in bringing about this result.

The first case was that of a girl, aged fifteen, whom I had previously dosed with most every known tænicide, with the result each time of bringing away a portion of the worm, but always minus the head. On July 10, 1884, I administered half a drachm of chloroform in two ounces of mucilage, and in half an hour afterward one ounce of castor-oil. At about noon the bowels moved freely and the parasite was expelled entire.

Case No. 2 was an adult, aged fifty-two. He had also been subjected to treatment by male fern and other drugs, but unsuccessfully. On January 25, 1885, I ordered him half a drachm of chloroform as above mentioned, followed by an ounce of castor-oil, and within four hours the whole worm was passed.

Case No. 3 had suffered from the presence of a tænia for a year and a half. Had tried many remedies without

avail. I gave him the same quantity of chloroform, but combined the castor-oil with it. The result was entirely satisfactory.

All three patients have remained well since. In each case the patient was allowed to eat a light supper and the medicine was given before the breakfast hour in the morning; no food being allowed till the bowels moved. The only disagreeable symptoms caused by the chloroform were in one case slight nausea and in all a trifling sense of intoxication with slight headache and somnolence, which passed off in a couple of hours after the oil operated. No further discomfort was complained of.

It will be noticed that half a drachm was the largest quantity of chloroform used. In case this should not prove sufficient, I would prefer, in subjecting the patient to treatment at a subsequent time to administer a second half a drachm some twenty minutes or half an hour after the first dose of a like amount of chloroform, or even several subsequent doses of a few drops each, at intervals of some minutes, than to give more than the maximum quantity here mentioned. By this latter method the effect on the worm might be equally as great, while the action of the drug on the heart would not be as likely to produce the alarming symptoms which have been reported where doses of one drachm or more have been given.

Progress of Medical Science.

Regressive Locomotion.—Dr. Luigi Mazotti relates' in *La Rivista Clinica* for June, 1885, the case of a man, sixty-six years old, admitted to hospital for scurvy. He had always been a hard drinker, but had enjoyed good health up to the age of fifty-five, at which time he had an illness which lasted for five months and left behind it a lowered general condition of health. In 1882 he suffered from an attack of sudden loss of consciousness of short duration. Since that time he had experienced dizziness occasionally, but had not fallen. He had been gradually growing weaker up to the period of admission to hospital. After being under treatment for scurvy for a time, his general condition began to improve, and orders were given that he should be allowed to get up and walk about the ward. It was then discovered that he could not take a step in advance, but walked backwards. When placed upon his feet he seemed a little unsteady, looking down to the ground and separating his legs as if fearing to lose his equilibrium. When taken by the arm and told to walk he responded that he was unable to do so, and when commanded to try, he took several steps backward, moving his legs with an appearance of exertion as though they were held. After having gone a short distance in this manner, the body became arched backward, and rotated from the right toward the left, and the man would have fallen if he had not been supported. At another time, after having been dragged forward by two of the orderlies, he was told to go ahead by himself. But as soon as his arms were released by the attendants he began to turn around in a circle with the right leg as the axis. When the patient was in bed he was able to execute all voluntary movements without difficulty, the special senses were normal, tactile sensation was good, though not very acute, and the tendon reflexes were a little exaggerated, especially on the right side. The patient died not long after of an acute intestinal trouble. At the autopsy was found a slight amount of leptomeningitis over the vault, evidently of recent origin. There was, further, marked atheroma of the arteries at the base of the brain, but beyond that nothing. The cerebellum, pons, medulla oblongata, peduncles, etc., were all normal, and bore not the slightest evidence of disease. Owing to certain legal difficulties it was impossible to secure the spinal cord, but a good portion of the upper end was examined with negative result. But the patient presented no symptoms of tabes dorsalis or of any other recognized spinal lesion. In view of these facts the author was forced to conclude that the phenomenon of regressive locomotion was dependent, in this instance, at least, to circulatory disturbances. The existence of these was rendered most probable by the fact of the extensive and marked atheroma, and were probably exaggerated by position when the patient rose to his feet. Dr. Mazotti therefore concludes with Nothnagel that the clinical symptom of regressive locomotion is of no value as a diagnostic sign in a localized cerebral lesion.

Ichthyol.—This is a bituminous substance, found in the Tyrol, and formed from the remains of antediluvian fishes. Its chemical constituents are carbon, hydrogen, oxygen, sulphur (ten to sixteen per cent.), and phosphorus (0.5 per cent.). It has the appearance of tar, is about of the consistence of vaseline, is slightly soluble in water, alcohol, and ether, and is miscible in all proportions in oils and vaseline. Owing partly to its large percentage of sulphur it is found to be of value in the treatment of skin diseases, and especially of acne rosacea. In the latter disease it is used externally and internally, and even sometimes hypodermatically. For internal use a solution is made of five to ten parts of ichthyol to twenty parts of distilled water, the dose of which is fifteen drops, gradually increased to fifty, twice a day in water. An ichthyol soap is also made, and recommended strongly by Unna (*Volkmann's Klinische Vorträge*, No. 252) in the treatment of acne. It is useful also in burns and other traumatic lesions of the skin. Lorenz (*Deutsche Medicinische Wochenschrift*, No. 23, 1885) has found it of value, externally applied, in relieving the pains of chronic articular rheumatism, using for this purpose an ointment of the strength of thirty per cent. Internally, ichthyol acts as an aperient, and has also been used with apparent benefit in gastritis in doses of two to three grains twice a day. The wide range of applicability of this medicament is to be explained by the property which it seems to possess in a remarkable degree of subduing inflammatory processes.

Double Renal Artery with Thrombosis of one of the Trunks.—Dr. Luigi Mazzotti reports in the *Bulletino delle Scienze Mediche di Bologna* the case of a woman, sixty-six years old, admitted to hospital suffering from very severe pains in the epigastric and hypochondriac regions, accompanied by a slight elevation of temperature, extreme thirst, dyspnœa, œdema, and delirium. The urine was albuminous and contained a considerable quantity of blood. The general condition improved somewhat under treatment, but about a month after admission the patient was seized with uncontrollable diarrhœa and vomiting, and died in a few days. At the autopsy the right kidney was found to be supplied by two arteries, and to have two ureters. There was but one vein, however. The supernumerary ureter was very small and united with its mate before entering the bladder. One of the arteries was pervious, while the other was closed throughout its entire extent by a thrombus. The right kidney presented in general a normal appearance, though of a somewhat redder color than usual. In the upper part, however, was a spot about two-fifths of an inch in diameter, in which the cortical substance presented a pale gray color. Microscopical examination showed that this was due to a granulo-fatty degeneration of the tubular epithelium. Examination of other portions of this kidney and of the one on the left side showed no pathological changes.

Succedanea of Cocaine.—Since the discovery of cocaine and its anæsthetic properties, numerous experiments have been made with other substances, but the only ones which have, as yet, been found to have a similar effect are apomorphine and menthol. Bergmeister and Ludwig (*Bull. Gén. de Therap*, July 30, 1885) found that in about ten minutes after the instillation of six to eight drops of a two per cent. solution of apomorphine

there was complete anæsthesia of the conjunctiva, lasting for from five or ten minutes to an hour. This was accompanied by dilatation of the pupils of somewhat shorter duration. But the first effect of the solution was to cause a sensation of pain and smarting. The hydrochlorate, lactate, and pure apomorphine were used at different times, and all had the same temporary irritant action. Another unpleasant symptom caused by the action of the drug was nausea. The subjects were also frequently left with a sensation of fatigue which lasted for several hours. Unless these inconveniences can be obviated in further experiments, it is not likely that apomorphine will ever become a formidable rival of cocaine as a local anæsthetic, but it is, nevertheless, well to know that it possesses this property, as cases may arise in which its employment would be of great utility. Rosenberg (*A Medicina Contemporanea de Lisboa*, August 2, 1885) has used menthol, in a twenty to thirty per cent. alcoholic or ethereal solution, with success. The effect of menthol is not of as long duration as that of cocaine; but the former seems to have a sort of cumulative action, as when the application is repeated, even at long intervals, the anæthesia produced by the last application is of much longer duration than that following the first.

Belladonna as an Antidote of Iodide of Potassium.—In three cases in which iodide of potassium caused unpleasant naso-pharyngeal symptoms, Dr. P. Aubert found entire relief afforded by extract of belladonna in doses of three-fourths of a grain, morning and night. He found even that, after the use of belladonna for a few days, it could be discontinued without a return of the symptoms of iodism.—*La Independencia Médica*, August 1, 1885.

Decoction of Lemons in Gonorrhœa.—Dr. Rebatel recommends this simple remedy, first suggested by Mannino, and affirms that it quickly destroys the vitality of the gonococci. Three fresh lemons are cut up into small pieces and put into ten ounces of water, which are then boiled down to three ounces. The liquid is then strained and used as an injection repeated three or four times a day. The decoction should be freshly prepared every second day. Instead of this decoction may be substituted a solution of one grain of salicylic acid and twenty-five grains of citric acid in eight ounces of water. —*Rivista Clinica e Terapeutica*, August, 1885.

Albumen in Chronic Diarrhœa.—Dr. Celli speaks highly of albumen in the treatment of enteritis. The whites of a dozen to eighteen eggs are beaten up with about a quart of water, and the whole taken at different times through the day, a few drops of laudanum being added if there is very severe pain. The author has used this remedy with success in a considerable number of cases of chronic diarrhœa which had resisted the action of all other remedies.—*Il Movimento*, June, 1885.

The Operative Treatment of Club-foot.—In an article on this subject Dr. Lorenz reviews the different operations which have been proposed for the correction of talipes. Of these there are fourteen, exclusive of tenotomy, as follows: 1, Linear osteotomy of the scaphoid practised on the plantar surface (Hahn); 2, linear osteotomy of the tibia above the malleolus (Hahn); 3, enucleation of the cuboid (Solly); 4, enucleation of the astragalus alone (Lund, Maron); 5, the same with resection of the tip of the external malleolus (Maron, Reid); 6, excavation of the spongy portion of the astragalus, leaving the articular surfaces (Verebely); 7, enucleation of the astragalus and excision of a wedge-shaped piece from the anterior portion of the os calcis (Hahn); 8, enucleation of the astragalus and cuboid (Albert and Hahn) or of the astragalus and scaphoid (West); 9, enucleation of the astragalus, cuboid, and scaphoid (West); 10, enucleation of the cuboid and scaphoid (Bernet); 11, resection of the head of the astragalus (Lücke, Albert); 12, excision of a wedge from the outer half of the neck of the astragalus (Hüter); 13, excision of two wedges, perpendicular to each other, with bases at Chopart's articulation and the astragalo-calcanean joint (Rydygier); 14, excision of a wedge without regard to any individual bones (O. Weber, Davies Colley, R. Davy). Of all these the only ones which the author regards with favor are enucleation of the astragalus in young children, and No. 14 in adults. He says, however, that Rydygier's operation gives good results in certain cases.—*Lo Sperimentale*, July, 1885.

Napelline in Toothache.—Dr. Grognot relates a number of cases in the *Bulletin Général de Therapeutique* of July 30, 1885, in which he administered napelline internally for the relief of odontalgia. In most of the cases the pain was directly traceable to caries, but in some it seemed to be more purely neuralgic in character. The napelline was given in granules of one-twelfth of a grain each, repeated every fifteen minutes. In most of the cases reported, the pain had ceased after five or six granules had been taken. The author urges the necessity of using only pure napelline, and advises that not more than twelve doses, or one grain, be given.

Chloral in Albuminuria.—Dr. Barduzzi has obtained excellent results with chloral in daily doses of thirty to forty-five grains, continued for some time, in the treatment of nephritis. Under its use œdema is reduced and the albumen nearly or entirely disappears from the urine. The author regards it as of especial value as a prophylactic of eclampsia in the albuminuria of pregnancy. It is also useful in the so-called physiological or normal albuminaria.—*Il Movimento*, Nos. 9–12, 1885.

Plantar Hyperæsthesia.—M. Barbillion describes a singular affection characterized by an excessive impressionability of the soles of the feet to various external influences. In one case the patient, a grocer's boy who was obliged to be on his feet the entire day, began, shortly after undertaking this work, to have acute pain in both feet toward evening. Soon the pain became continuous and was felt in the whole plantar region. It disappeared as soon as the patient got into bed, but would be brought back whenever in movements of the legs the soles of the feet were brought in contact with the bedclothing. Cold, in this case, brought a certain measure of relief. The reflexes were normal and there were no symptoms of ataxia. There was no redness nor swelling of the integument, and the perspiration was not abnormal in quantity. Three applications of chloride of methyl, one of which caused vesication, brought about a cure. In another case a cure followed the application of a blister covering the plantar surface. The writer reports other similar cases, and concludes that the affection is an idiopathic plantar anæsthesia, distinct from other painful diseases of the feet.—*Journal de Médecine et de Chirurgie Pratiques*, July, 1885.

Progressive Tabetic Contracture—The following are the conclusions of Dr. E. Demange to an interesting article in the *Revue de Médecine* for July, 1885: 1, There is a special form of tabes with contracture, distinct from spasmodic tabes and from amyotrophic lateral sclerosis, but yet having many points of resemblance to these affections; 2, this form is observed in extreme age, after the seventieth year; 3, its cause is to be referred to a special manifestation upon the spinal vessels of generalized atheroma; 4, anatomically it is characterized by an interstitial diffuse sclerosis, of vascular origin, of different parts of the cord and more especially of the lateral columns, without, however, ever being limited to this system alone; 5, clinically it occupies a position intermediate between spasmodic tabes and amyotrophic lateral sclerosis.

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EUTHANASIA.

"THE kindest wish of my friends is euthanasia," wrote Arbuthnot, and the longing of many a sufferer ever since the world began has been for the same blessed boon. Bedside experience has convinced many a physician that this question is not a mere theoretical one. The wider our acquaintance becomes with the pathology of disease the more importance it is assuming. There are certain forms and stages of disease before which we stand practically powerless, though the feeling that "where there's life there's hope," often inspires us to keep the spark of life flickering as long as possible. But how often do we know beforehand that our efforts will be fruitless! We are obliged to content ourselves with endeavors to make the physical aspect of death as easy as possible for the senses of the patient, and the feelings of his friends. In the majority of cases nature mercifully benumbs the senses at the approach of dissolution, which is sometimes so gradual that it resembles falling asleep, "like one who wraps the drapery of his couch about him and lies down to pleasant dreams," as the author of "Thanatopsis" beautifully expressed it. Death-bed utterances generally occur in books. Indistinct murmurings of a moribund person are often vivified by imaginative friends into veritable utterances of one on the threshold of another world.

In many cases, however, of incurable disease no such euthanasia comes. There is to the very last a bitter struggle between sense and pain, as dreadful almost to contemplate as to endure. At this point comes up the practical consideration of the question, which in years to come is going to claim our attention more than it has done in the past. The mind of the laity, as well as of the profession, has already changed upon this matter; the assumption in both cases being—as in all matters concerning man's relation to the hereafter—toward a more liberal standpoint. Particular attention was called to the subject by the case of the distinguished patient who now lies quietly at Riverside. Fearless in the presence of any earthly foe, and asking no quarter, he had that natural shrinking from the painful death which his malady might have occasioned. He asked for and was promised a quiet end. No one questioned either the reasonableness of the patient on this point, or the wisdom of the assurances of his medical attendants.

What is euthanasia in relation to the office of the physician. It has been formulated by a member of the Birmingham Speculative Club, as follows: "That in all cases of hopeless and painful illness, it should be the recognized duty of the medical attendant, whenever so desired by the patient, to administer chloroform or other anæsthetic, so as to destroy consciousness at once and put the sufferer to a quick and easy death, all needful precautions being adopted to prevent any possible abuse of such duty, and means being taken to establish beyond the possibility of a doubt that the remedy was applied at the express wish of the patient."

One of the daily journals recently reported the result of interviews on the subject with several of the leading physicians of this city. All agreed as to the soundness and humanity of the views above stated, but no one cared to express a frank opinion as to how they should govern daily conduct. It is claimed that such a code of principles in nowise contravenes the laws regarding the sanctity of human life. Any man who sacrifices his life, say its advocates, to save another from lingering pain, is always reckoned a hero. Why should he not do the same for himself? In his own case the motive is, of course, lower. It may be styled a form of selfishness. The mere act itself is, however, regarded as justifiable in both cases.

The opinions of those consulted were unanimous in regard to the serious risks incurred in the adoption of any such principle. The latter's rigid enforcement would not allow for possible errors in diagnosis. In cases of carcinoma and phthisis no room for such doubt would exist. But there are many cases where (granting even that euthanasia should be demanded by the patient) no such thing would be thought of by the medical attendant unless his own affirmative judgment should be sustained by the result of a consultation; this argues a much more advanced state of professional opinion than obtains at the present time. Patients supposed to be *in extremis* have often recovered. The patient himself might not be in that state of mind where he could rightly judge concerning euthanasia, though it might possibly be indicated in his own particular case. Its enforcement would have to be under legal restraint. The further settlement of this question depends on the growth of public opinion. We cannot hasten it. For the present the guide of each man must be his own conscience.

A NEW DIAGNOSTIC TEST FOR THE TUBERCLE BACILLI.

THE importance of the bacillus tuberculosis in the diagnostic study of phthisis is now universally admitted. The methods by which this parasite is recognized are not elaborate or difficult to put in practice. Many physicians throughout the country, not microscopical experts, can and do make examinations for the purpose of discovering them. When they are numerous in the specimen there is little danger of error, but when only a few can be seen, the problem is more difficult. The lepra and the lupus bacilli quite closely resemble those of tubercle. The French observers Alvarès and Tavel (*Prog. Medical*, August 22, 1885) have shown apparently that there exists in normal secretions a bacillus resembling in many respects that of tuberculosis. Microscopists find, also, that bits of horny tissue from the horny layer of the epidermis, or particles of feathers floating in the

air will stain like the tubercle bacilli. Hæmatin crystals, according to Lustig, also may be taken for bacilli. Thus there are some sources of error in examining secretions which are poor in the special organisms.

Professor Voltolini, of Breslau (*Allgemeine Med. Centr. Zeit.*, No. 65), has discovered a method by which these sources of error can be eliminated. This consists in acting upon the preparation with fuming nitric acid, so that an appearance of chain-like spores is seen in the bacilli. The sputum, for example, is spread upon a cover-glass and dried as usual. The cover is then taken up with pincers and slowly dipped into the strongest undiluted nitric acid—acidum nitricum fumans. It is then slowly withdrawn and washed with pure water. The preparation is then dried and colored in the usual manner; but it is important to leave the cover in the staining fluid for from twelve to twenty-four hours. The layer of sputum, or pus, or the section must be quite thin, and the acid must be fresh and fuming. The bacilli so treated retain their form perfectly, but their interior appears to contain a chain of spores. The appearance, however, is thought to be due not to spores, but to an artificial coagulation. It is characteristic of the bacilli of tuberculosis, and, as Voltolini believes, of no other bacillus.

THE COMMITTEE ON THE INTERNATIONAL MEDICAL CONGRESS AND ITS WORK.

For the first time in its history the International Medical Congress has fallen into the sole management of a society of the country in which it is to meet. Although Sir James Paget, an ex-President, expressly affirms that this was not expected or desired when an invitation was given, yet it is evident from recent events that the society referred to intends to retain its hold, and force upon the Congress its own men and methods. The work of the Committee which met here in such secrecy on September 3d but too surely confirms this. Details of its mysterious labors are given elsewhere. These show some indications of adroit wriggling to escape the results of previous blunders, but no manly meeting of the issues, and no recognition of the real demands of the profession. The Committee have utterly eliminated and blotted out Drs. Cole and Shoemaker, trusting, we presume, to gain back Philadelphia by thus making scapegoats of these gentlemen. They have also filled the vacancies in the Presidencies of the Sections. Their list of names suggests both freshness and decay, but does not fairly represent American medicine. And the profession will very quickly ask who many of these new men are who thus take the seats which have heretofore been held only by recognized leaders? Is our country to be made ridiculous by their upheaval, and the Congress turned into a menagerie of unknown doctors and ethical sticklers?

However, though the appointments are weak enough, they need not kill the Congress. But a much more serious thing remains: no attempt was made to remove the Code issue from the Congress. It is still incumbent on an American physician to subscribe to the American Medical Association's Code of Ethics in order to hold any official position in the Ninth International Congress—if it meets in this country. The stupidity, as well as absolute wrongfulness, of failing to meet this point is certainly beyond parallel. The good Lord only knows, perhaps, what a number of nice, venerable, determined old gentlemen we have here trying to manage our little medical world; but many of us are getting some inkling of their immeasurable and fathomless fatuity. It appears, at any rate, that they are bound to destroy the Congress, for they persist in forcing upon it restrictions which cut off from the Congress and impugn the respectability of a large number of the most honored men in our profession. In thus doing they violate justice and right, break the pledges at Copenhagen, and affront their fellow-physicians here. Of course a bitter controversy is inevitable; and we are sorrowfully forced to the conclusion that there is at present no hope for the Congress whatever. The profession here and in other centres is almost a unit against the policy of the Association and its Committee, and it will continue to protest against the organization of a meeting which will be so thoroughly misrepresentative of American medicine.

A BEGINNING IN BACTERIOTHERAPY.

It is a fact well known to students of bacteriology, that certain forms of micro-organic life are inimical to each other, and will not thrive when together in the same culture-fluid. One form or the other, whichever is the stronger or the more suited to the medium in which it finds itself, will increase and flourish at the expense of the other, just as the weeds in a neglected garden grow up and choke the more tender plants, and appropriate to themselves the nourishment in the soil which the others need for their sustenance. Such being the case in cultures outside of the body, it is but natural to suppose that the same thing would occur within the organism. And if it be true that disease depends upon the presence of certain noxious microbes in the organs or tissues of the body, a rational means of combating the disease would seem to be to introduce other microbes which are fatal to the existence of the specific organisms.

This has actually been tried, with apparent success, in a case of pulmonary tuberculosis, by Dr. Arnaldo Cantani, of Naples, who describes his experiment in the *Giornale Internazionale delle Scienze Mediche*, No. 6, 1885. The patient was a woman, forty-two years of age, whose father had died of pulmonary disease. She presented the signs of a large cavity in the apex of the left lung, was suffering from hectic fever, and had an abundant purulent expectoration containing quantities of tubercular bacilli. She had been taking quinine, salicylic acid, cod-liver oil, etc., but continually grew worse and lost in weight and strength. Animals inoculated with her sputa became tuberculous. On May 4th, all the drugs which the woman had been taking were discontinued, and she began to inhale every day, by means of an ordinary atomizer, a mixture of gelatine and beef-broth containing a very rich, pure culture of bacterium termo. An almost immediate improvement was noticed, the expectoration became less, and the tubercle bacilli began to disappear, until on June 1st no more could be found in the sputa. As the tubercle bacilli became less numerous their place was taken by the bacterium termo. The tubercle bacilli had not reappeared at the time the report was made, and inoculations practised with the sputa upon animals failed to cause tuberculosis in them. At the same time with this apparent

local arrest of diseased action the patient's general condition improved, the evening rise of temperature was less marked, there was an increase of strength, and a gain of nearly a pound and a half in weight was noted.

Of course, one such case proves nothing. Patients with pulmonary tuberculosis, in common with sufferers from other diseases, are often dosed too much, and it is not uncommon to note a temporary improvement following the withdrawal of all medicine. Yet it is interesting as being the first attempt to fight microbes with microbes. And it opens up a large field of speculation to an imaginative mind in contemplating the future contests of the bacteria in the human battle-ground. Although, should such attempts succeed, we should behold one of the grandest achievements of this age of great discoveries, and Cantani, as the founder of bacteriotherapy, would rank among the immortals, yet there would be something humiliating in the thought that man could not cope single-handed with his infinitesimal foes, but was forced to call to his aid other invisible allies to fight his battles for him.

We shall look with interest for reports of further experiments of this nature, and we wish the bacterium termo success.

THE MONTREAL EPIDEMIC AND THE UTILITY OF VACCINATION.

THE present epidemic of small-pox at Montreal is furnishing incidentally some evidence as to the utility of vaccination. From August 1st up to September 14th, the total number of cases of small-pox at Montreal was close upon one thousand, and the number of deaths about three hundred and thirty. The very large majority of these victims were French-Canadian Catholics. Thus, out of one hundred and twenty-eight cases occurring last week, all but five were Catholics; while of the total number of deaths since August 1st, only thirty-four have been among Protestants. It appears that the Canadian Catholics, on religious grounds, do not allow themselves to be vaccinated. Hence, the force of the epidemic is spent upon them. No doubt uncleanly modes of life have something to do with the excess also.

THE AMERICAN MEDICAL PROFESSION *V.* THE ASSOCIATION.

THE real trouble in the case of the Washington Congress is that under the direction of a few gentlemen prominently interested in the American Medical Association, the local issue of the Code has been forced upon an international scientific body. There was no justice or right in this, and it was in violation of all precedent and of tacit pledges made at Copenhagen. The consequence of their action is that a large number of our country's best physicians are incapacitated from holding any position in the meeting, and, of course, cannot with self-respect take part in the work of a body which impugns their professional respectability. The profession has almost unanimously condemned this action. In proof of this we give here a list, which we believe is complete, of the journals in this country that have disapproved of the course of the Association: *New York Medical Journal, Boston Medical and Surgical Journal,* THE MEDICAL RECORD, *Chicago Journal and Examiner, Maryland Medical Journal, Medical Age, Philadelphia Medical Times, Louisville Medical News, Atlanta Medical and Surgical Journal, Virginia Medical Monthly, Indiana Medical Journal, Pacific Medical and Surgical Journal, American Practitioner, New Orleans Medical and Surgical Journal, Cincinnati Medical Journal, Columbus Medical Journal, Medical News, Kansas City Medical Index.*

We believe that there is not one of the few medical journals that defend the course of the present Committee which has not some official or close personal connection with the organization of the American Medical Association and the Congress.

There can thus be no doubt as to the sentiments of the profession. It is impossible that this sentiment should be changed by the mere fact that Drs. Cole and Shoemaker have been so completely effaced. This was a sop to the Philadelphia Cerberus; but it was a mean act and will win no support to the Committee.

News of the Week.

THE NEXT MEETING OF THE AMERICAN GYNECOLOGICAL SOCIETY.—The American Gynecological Society will hold its Tenth Annual Meeting at the Columbian University, in Washington, on Tuesday, Wednesday, and Thursday, September 22, 23, and 24, 1885. Among the papers announced to be read are the following: "The Natural Hygiene of Child-bearing Life," by Dr. S. C. Busey, of Washington; "Remarks on the Use of Tarnier's Forceps," by Dr. Ellwood Wilson, of Philadelphia; "Facial Paralysis in the Infant from the Use of the Obstetric Forceps," by Dr. T. Parvin, of Philadelphia; "The Genu-pectoral Posture in the Prolonged Nausea and Vomiting of Pregnancy, with Cases," by Dr. H. F. Campbell, of Augusta, Ga.; "On Two Rare Cases in Abdominal Surgery" (the President's Address), by Dr. W. T. Howard, of Baltimore; "The Care of the Perineum during Labor," by Dr. T. A. Reamy, of Cincinnati; "Report of a Case of Cæsarean Operation," by Dr. E. W. Jenks, of Detroit; "Puerperal Diphtheria," by Dr. H. J. Garrigues, of New York; "A Modification of Emmet's Cervix Operation in Certain Cases, with a Case," by Dr. R. S. Sutton, of Pittsburg; "Inflammation of the Parotid Glands after Ovariotomy," by Dr. William Goodell, of Philadelphia; "A Study of an Unusual Type of Puerperal Fever," by Dr. Fordyce Barker, of New York; "Peristalsis of the Genital Tract," by Dr. J. R. Chadwick, of Boston; "Four Cases of Oöphorectomy, with Remarks," by Dr. Joseph Taber Johnson, of Washington. Members of the profession are cordially invited to attend the meeting.

AN INTERNATIONAL PHARMACEUTICAL CONGRESS was held at Antwerp recently. The proceedings were opened by the Minister of Foreign Affairs, who in his address dwelt on the importance of the questions before the Congress to the well-being of the people. The following are the questions down for discussion: 1. Examination of the project of an international pharmacopœia, elaborated by the committee appointed at the last Congress in London. 2. Pharmaceutical instruction. What

instruction ought to be acquired previously to pharmaceutical studies? Pharmaceutical scientific studies. Professional applications. 3. Adulterations of human food, legislation, administrative service, etc. 4. Drinking water. The characteristics of potable water. What are, in the present state of science, the best practical procedures to be recommended for recognizing these characteristics?

THE NEW YORK POST-GRADUATE MEDICAL SCHOOL opened its regular session on September 12th. We learn that it already has an excellent class, and that there are the best prospects for a large attendance and active work. The school has spent a thousand dollars in fitting up its hospital, and much work has been done in preparing and equipping thoroughly the different departments.

A NEW MEDICAL COLLEGE is to be established at Los Angelos, in Southern California. The peculiarly great need of having one, or perhaps two medical colleges in Southern California has been long apparent.

BRITISH COMMENT ON THE INTERNATIONAL CONGRESS.—The controversy in regard to the Washington meeting of the International Medical Congress in 1887 has entered on a new phase, by the publication in America of letters from Sir James Paget and Sir W. MacCormac, in both of which the writers expressly declare themselves in favor of the Congress meeting elsewhere than in Washington, unless an early modification of the existing state of things is brought about. Sir James Paget addressed his letter to Dr. Minis Hays, and, as the immediate predecessor in the presidency of the Congress of the lamented Professor Panum, his observations are likely to be received, even by the unfamiliar crowd of office-bearers at present nominated to posts in the next Congress, with attention, if not with respect. Sir James says decisively, "certainly it was not supposed that the Congress would be regulated, with any degree of exclusiveness, by the members of a Medical Association, however numerous; and I think it quite as certain that, if this had been thought possible, the proposal that the next meeting should be held in the United States would not have been adopted." Sir James farther expresses his belief, that without the support of the eminent men who now hold aloof from the Congress the meeting cannot be a success; and, though the proposition is too self-evident to need enforcing, it is perhaps as well that so high an authority should have thus spoken. A meeting is to be held this month by the innovating section of the American Association, and it is to be hoped it may be sufficiently impressed with the mischief it has already done to feel satisfied with the notoriety accruing from it, and agree to retire into that obscurity which is eminently becoming to its members, and out of which they have, this time at any rate, most unwisely emerged.—*Medical Press and Circular.*

SMALL-POX NOW PREVAILS at Montreal, London, Paris, Bordeaux, Venice, Trieste, St. Petersburg, Warsaw, and Japan. A few cases have appeared in this city, and in several places in New England. The State Board of Health is making arrangements to furnish vaccine virus for the purpose of vaccinating persons all along the Canadian border of this State.

CHEAP MEDICAL SERVICES.—A club of 4,800 members, in Berlin, recently advertised for six medical officers to attend them at a salary of $375 per annum. This would make the contribution from each member of the club about 75 cents a year for medical attendance. More than 400 doctors applied for the places.

THE WORK OF THE SUMMER CORPS OF VISITING PHYSICIANS.—The summer corps of visiting physicians visited this year 61,815 families, living in 15,832 tenements, and prescribed for 2,409 sick persons. The people were found to be in an unusually healthy condition, and the tenements were in better shape than usual.

CHOLERA IN JAPAN.—Up to July 1st, there had been only sixteen cases of cholera in Japan. Recent reports show that the disease has become more active, and at one sea-port, Nagasaki, there were, between August 24th and September 1st, 300 cases. With both cholera and small-pox actively prevalent, Japan becomes a country to be carefully watched by our health officials.

THE CHOLERA IN SPAIN, FRANCE, AND ITALY continues to decrease in activity. Still, on September 14th, there were 1,075 new cases and 371 deaths reported. The disease has about disappeared from Toulon and Marseilles. But in little towns near those cities the mortality is even greater, in proportion to the number of inhabitants, than it has been at any time this year within the city lines. The disease is spreading in Italy. Rome has established quarantine against Sicily, in whose largest city, Palermo, the plague seems to have become fixed.

THE SURGEON-GENERAL OF THE MARINE HOSPITAL SERVICE.—There are several Republican Chiefs of Bureaus in the Treasury Department who have not yet been removed. Among them is Dr. J. B. Hamilton, Supervising Surgeon-General of the Marine Hospital Service. There is much talk at present concerning his place. Dr. Hamilton is reported, like his predecessor, Dr. Woodworth, to have the warm support of Senator Logan. There are several candidates for his position, all of them it appears from the West—Indiana having two, Kentucky, Michigan, and Illinois each one. Vice-President Hendricks is said to be supporting the claims of a Dr. Matthews, of Louisvile, while Messrs. McDonald and English are working for Dr. Walling, a physician and ex-druggist of Indianapolis, and son-in-law of Mr. English. Among the candidates named we hear of no worthy successor to Dr. Hamilton. The place, if made vacant, ought to be filled by some gentleman familiar with the Service, and having some professional standing. As an executive officer Dr. Hamilton has not been surpassed, and he has vastly improved the discipline and efficiency of the Service. A mistaken ambition to be more than the head of his Bureau has estranged the support of many members of his profession. This is the sole complaint that can be made against him.

THE METHODS OF THE AMERICAN AMBULANCE SERVICE, suspension harness and all, are warmly praised in Liverpool, where they have been in use for over a year. The record of the Northern Hospital gives the average time from the call to the departure of an ambulance at two minutes and fourteen seconds by day, and four minutes by night.

ADVERTISING MEDICAL COLLEGES IN THE DAILY PAPERS.—Our attention has been called to the advertisement of a Colorado medical college in the Denver *Tribune-Republican*, also to that of a Chicago medical college in the *Leavenworth Times*. It is not generally considered proper or in good taste for medical colleges to advertise in purely secular papers. We regret that the practice seems to be endorsed by the esteemed and venerable Dr. N. S. Davis, Dean of the Chicago College referred to. As Partridge would say: *Nemo omnibus horis sapit.*

SMALL-POX IN JAPAN.—Reports furnished us by the National Board of Health show that during the first six months of this year there occurred 4,472 cases of small-pox in Japan, with 1,191 deaths. There is need of extra precautions to prevent the introduction of this disease into our Western ports.

MORTALITY FROM THE CHOLERA IN SPAIN.—From March 4 to August 5, 1885, the National Board of Health reports 103,608 cases of cholera occurring in Spain, with 43,551 deaths, giving a mortality ratio of about forty-two per cent.

DR. HIRAM H. JAMES, of Rahway, N. J., died at Saratoga, where he was being treated for liver affection, on September 11th. He was a graduate of the Jefferson Medical College, of Philadelphia, and was forty-six years of age.

DEATH OF DR. GUY, OF LONDON.—A cable despatch announces the death of Dr. William Augustus Guy, of London, at the age of seventy-five. He was educated at Christ's Hospital and Guy's Hospital, and at Cambridge, graduating in medicine in 1837. In 1838 Dr. Guy was appointed to the Chair of Forensic Medicine in King's College, London, with which department of medical science his name has been mainly associated. Dr. Guy wrote a series of essays on the Pulse and Respiration; on Statistics and the Numerical method, and on Health, Disease, Crime, and Vagrancy. These essays appeared in "Guy's Hospital Reports," the *Journal of the Statistical Society*, and in *Fraser's Magazine*. He also wrote "Principles of Forensic Medicine" and "Public Health." He was editor of Hooper's "Physician's Vade-mecum," of Walker's "Original," and of the "Evils of England." He wrote several tracts on social science questions and on the Eastern question, his signature, "A London Physician," being well known. Dr. Guy has devoted considerable time to sanitary reforms and other matters of public interest.

DR. FRANCIS D. CUNNINGHAM, of Richmond, Va., died on September 9th, at the age of forty-nine. Dr. Cunningham was born in Goochland County, Va. He graduated from the Medical College of Virginia in 1857, and afterward continued his professional studies in London and Paris. In 1870 he succeeded to his father's practice, which his own reputation as an ophthalmic surgeon had materially increased. Dr. Cunningham was a member of the Richmond Academy of Medicine, of which he was President in 1872; of the Virginia State Medical Society, of which he was President in 1875; of the American Medical Association, and of the American Public Health Association. He served as Professor of Anatomy in the Medical College of Virginia from 1867 to the time of his death. During the rebellion he was a surgeon in the Confederate Army, and in 1862 and 1863 he was Medical Director of the Trans-Mississippi Department.

ILLNESS OF DR. E. G. JANEWAY.—We greatly regret to learn of the serious illness with pneumonia of Dr. Janeway. He is at Seabright, N. J.

A DOCTOR ASSASSINATED.—Dr. Thomas Waugh, a physician of Chicago, Ill., was fatally shot on September 12th, while returning from a late visit to a patient. The assailant is said to have been a jealous husband.

BISMARCK AND HIS PHYSICIAN.—It is certain that Bismarck's physician, though a charlatan, is no fool. It is related that when first presented the Prince was sick, and peevishly declined to answer questions. "As you like," said the doctor, "then send for a veterinary surgeon, as such practitioners treat their patients without asking them any questions." The Chancellor was captured.

A SUCCESSFUL DOCTOR.—A native of Madagascar who studied medicine in Edinburgh and returned home, now has seventy young men studying under him, and a large class of women whom he is training for nurses. He is in great favor with his Queen, and is about to marry the Prime Minister's daughter.

MEMOIRS OF A GREAT SURGEON.—We learn from the *Allgemeine Wiener Medizinische Wochenschrift* that the late Russian surgeon, Professor Pirogoff, left an autobiography. Portions of this have already been translated from the Russian by Dr. Th. Bergmann, and have appeared in the journal referred to. The history of Pirogoff's early struggles is extremely interesting, and we should be glad to see the work made accessible to American readers.

CALIFORNIA. — *The Pacific Medical and Surgical Journal* appears in a new and tasteful dress. We learn from its leading editorial that more serious efforts are apparently being made to enforce the medical registration laws and put down quacks.

SOUTHERN SURGERY.—Our Southern brethren make good surgeons as well as physicians. We are glad to learn that Dr. Robert Battey, of Rome, Ga., has succeeded with his new hospital, and that since January last he has performed ovariotomy nearly every week, so far without losing a case.

OZONE AS A CAUSE OF PNEUMONIA.—Mr. Daniel Draper, Director of the Central Park Meteorological Observatory, has issued a circular in which he presents a number of statistics, showing apparently some relation between the prevalence of ozone in the atmosphere and the prevalence of pneumonia. To illustrate his observations, Mr. Draper takes the figures from January to May inclusive, for eight years. In 1878, during these months, there were 1,304 deaths from pneumonia, and the ozone percentage was 9.50 on 73 days. In 1882 the death-rate had increased to 2,056, and the ozone to 16.19 on 86 days. In 1884 the death-rate decreased to 1,608, and the ozone to 6.45 on 48 days. This year the death-rate increased to 2,308, and the ozone also increased to 13.26 on 87 days. The figures for 1882 and 1883 are

not quite so convincing. In the former the death-rate was 2,056, and in the latter 2,061. Yet in 1882 the ozone record was 16.19 for 86 days, and in 1883 12.73 for 85 days. The death-rates were about equal, though there was a difference of nearly twenty-five per cent. in the ozone ratings. Mr. Draper says, however, that he compared thousands of observations from the barometer, wet and dry thermometers, hygrometer, anemometers, and pluviometer with the mortuary statistics, and could find no continuous connection between these observations and the prevalence of pneumonia. It was only "when ozone was taken into consideration that there was found to be a very close connection between its observations and the death-rate from this disease." It has been very positively established by numerous observations that pneumonia prevails most at seasons when there are sharp variations in temperature, as, for example, in the Spring. We doubt very much if a case can be made out for ozone.

"The Courtesy of London Surgeons is phenomenal," writes Dr. Gay, in the *Buffalo Medical and Surgical Journal*. "I have never seen anything equal it, and have much admiration for it, and trust I have imbibed some of the spirit of it. At all events, I shall return home with the firm resolve that all strangers who may chance to come among us shall receive all the attention and courtesy that I may have in my power to extend to them."

New Medical Journal.—The *Quarterly Bulletin of the Clinical Society of the New York Post-Graduate Medical School and Hospital* is the title of a new medical periodical, edited by Drs. Seneca D. Powell, Thomas E. Satterthwaite, W. Oliver Moore, Charles Henry Brown, and Samuel Lloyd. It contains the proceedings of the Clinical Society of the School, and a number of original articles, college and hospital notes, etc. It is well edited and printed.

Experiments with the Microbe of Typhoid Fever.—At a recent meeting of the Academy of Sciences M. Tayon reported that he had inoculated himself and several of his friends with the microbe of typhoid fever. The general symptoms produced were insomnia, anorexia, pinched countenance, and liquid stools. There were also some local symptoms. A second inoculation, practised after complete re-establishment, produced no effect. No comment was made, but it was left to the Academy to form its own conclusions.

Good News for Pregnant Women.—Mr. John Bland, says *The Lancet*, has been letting his mind dwell on the case of women who have the misfortune to have to bear children in cold or temperate climates, as compared with their luckier sisters who have to discharge the same duty in the South of Europe or in Africa. He assumes that much of the difference is due to the mere difference of climate, the warm climate relaxing the tissues, and *vice versâ*. Upon this basis he has constructed a box with a heating apparatus, in which he proposes to place the lower part of the woman in labor. The heat of this box, he thinks, will bring the woman, at least in the lower part of the body, to the advantageous position of her more southern sisters. Again, it appears that a lady at the last Exhibition in Paris, in the seventh or eighth month of pregnancy, went up in a captive balloon, and before they could descend accomplished the whole of labor, including the expulsion of the placenta. He attributes this, not to the fright of the lady, but to the diminution of atmospheric pressure. He has therefore included in his invention a provision for exhausting the box of air on the approach of a pain. The process of labour is to be watched through a window!

Meeting and Work of the Committee on Organization of the International Congress.—The above Committee met in New York City on September 3d. Twenty-eight members, including their proxies, were present out of the total forty-six. The resignation of Dr. L. A. Sayre was accepted, and Dr. Austin Flint, Jr., was appointed in his place. Rules for the government of the Congress were then adopted. These are essentially the same as those governing previous Congresses. Section I. provides that the Congress shall consist of members of the regular profession . . . . who shall have inscribed their names on the register and taken out tickets of admission. The list of officers of the Congress is as follows: President, Austin Flint, M.D., LL.D., New York. Vice-Presidents, W. O. Baldwin, M.D., Alabama; H. I. Bowditch, M.D., Massachusetts; William Brodie, M.D., Michigan; Henry F. Campbell, M.D., Georgia; W. W. Dawson, M.D., Ohio; R. Palmer Howard, M.D., Canada; E. M. Moore, M.D., New York; Tobias G. Richardson, M.D., Louisiana; Lewis A. Sayre, M.D., New York; J. M. Toner, M.D., District of Columbia; the President of the American Medical Association, the Surgeon-General of the United States Army, the Surgeon-General of the United States Navy, the Supervising Surgeon-General of the United States Marine Hospital Service. Secretary-General, Nathan S. Davis, M.D., LL.D., Illinois. Treasurer, E. S. F. Arnold, M.D., M.R.C.S., New York. Chairman of the Finance Committee, Frederick S. Dennis, M.D., M.R.C.S., New York. Executive Committee of the Congress, Austin Flint, M.D., LL.D., President of the Congress; Nathan S. Davis, M.D., LL.D., Secretary-General; E. S. F. Arnold, M.D., M.R.C.S., Treasurer; Frederick S. Dennis, M.D., M.R.C.S., Chairman of the Finance Committee. Presidents of the Sections, A. B. Arnold, M.D., General Medicine; William T. Briggs, M.D., General Surgery; Henry F. Smith, M.D., Military and Naval Surgery; DeLaskie Miller, M.D., Obstetrics; Robert Battey, M.D., Gynecology; F. H. Tirrell, M.D., Therapeutics and Materia Medica; William H. Pancoast, M.D., Anatomy; John C. Dalton, M.D., Physiology; E. O. Shakespeare, M.D., Pathology; J. Lewis Smith, M.D., Diseases of Children; A. W. Calhoun, M.D., Ophthalmology; S. J Jones, M.D., Otology and Laryngology; A. R. Robinson, M.D., Dermatology and Syphilis; Joseph Jones, M.D., Public and International Hygiene; Henry O. Marcy, M.D., Collective Investigation, Vital Statistics, and Climatology; John P. Gray, M.D., LL.D., Psychological Medicine; Jonathan Tafft, M.D., Dental and Oral Surgery. The other officers of the Sections were not appointed, but power to fill vacancies was left with the Executive Committee.

Therapeutical.—Experience is the mother of therapeutics; physiology is the mother-in-law.

Reports of Societies.

THE AMERICAN DERMATOLOGICAL ASSOCIATION.

Ninth Annual Meeting, held at the Indian Harbor Hotel, Greenwich, Conn., August 26, 27, 28, 1885.

WEDNESDAY, AUGUST 26TH — FIRST DAY — MORNING SESSION.

THE meeting was called to order by the President, DR. W. A. HARDAWAY, of St. Louis.

DR. J. E. GRAHAM, of Toronto, Can., reported

A CASE OF TUBERCULO-ULCERATIVE SYPHILIDE OF HEREDITARY ORIGIN.

The patient was a girl, twenty years of age. On the right arm, from the wrist to the elbow, there was little but cicatricial tissue. The skin of the forearm presents elevations and depressions, and in places is covered with thin scales. The hand is not involved, and the affection does not extend deeper than the subcutaneous areolar tissue. For three or four inches above the elbow the arm is atrophied and covered with cicatricial tissue. At the upper border of the cicatricial tissue, there is an ulcer three-fourths of an inch wide, which encircles the arm. Above this there is sound tissue. No nodules are present. The left clavicle presents about its middle a swelling and ulceration about the size of a silver dollar. This was the result of a blow. There is no copper-colored appearance. Investigation of the family history showed that the mother was apparently healthy. Three of the patient's sisters, all younger than herself, were healthy. The father died of pneumonia when the patient was a child. It was subsequently learned that he had also had syphilitic ulceration of the throat. The treatment consisted in the local application of a mild mercurial ointment and the internal use of bichloride of mercury and iodide of potassium. The condition steadily improved, and in the course of six or eight weeks the ulceration had healed. The patient at that time passed from observation.

The speaker referred to the difficulties of diagnosis in this case, as there was a complete absence of specific history, the facts in regard to the father not being learned for some time after the case had been under treatment. There was no history of any previous evidence of hereditary syphilis, but taking all the facts into consideration, the doctor thought that there could be no doubt as to the correctness of the diagnosis.

Photographs, showing the condition, were exhibited.

DR. R. W. TAYLOR, of New York, remarked that it is now generally conceded that syphilis can be communicated to the child without infection of the mother, and he believed that he had been the first in America to call attention to this fact. He had seen this a number of times. The doctor had stated that he could obtain no history of early manifestations of hereditary syphilis. This is not uncommon, but that there is usually some indication of specific taint, although this may be so slight as not to excite notice, or its exact import is not recognized.

DR. GREENOUGH, of Boston, said that within the past two months he had seen a woman who had lost three children in succession from hereditary syphilis, yet she was strong and apparently perfectly healthy, and has never shown any signs of syphilis. This woman has been under observation for six or seven years.

DR. L. A. DUHRING, of Philadelphia, said that the result of treatment in causing a rapid cure in the case described would certainly incline one to the opinion that this was a case of syphilitic disease.

DR. J. N. HYDE, of Chicago, stated that he had seen cases which had convinced him that, while it is not the rule, still occasionally syphilitic children are born where, so far as observation can be made, no evidence of syphilis in the mother can be detected. As far as the general health is concerned, the women are usually pallid and weak, although there may be no symptoms which can be ascribed to syphilis. He had never seen inherited syphilis manifesting itself for the first time in advanced years. The more he saw of syphilis, the more he was satisfied that in its origin, heredity does not amount to very much. The accidental cases of syphilis are very common. He had seen the initial lesion of syphilis on the head of the penis, where it was unquestionably due to inoculation from the finger of the surgeon in catheterization. There was no doubt that the case described was one of syphilitic trouble, and as Dr. Duhring has said, the result of treatment unquestionably pointed in that direction. There are no cases which yield so readily as old cases of untreated syphilis. As to pronouncing it a case of hereditary syphilis, his experience would not permit him to do so.

DR. W. A. HARDAWAY, of St. Louis, considered it unwise to base our diagnosis on the results of internal treatment. Because a case gets well under anti-syphilitic treatment it does not prove that the affection is specific in its nature. Local treatment is often all that is necessary.

The next paper was entitled

CLINICAL NOTES ON PSORIASIS,

by DR. F. B. GREENOUGH, of New York. The paper was founded on the records of 394 cases of psoriasis. This number occurred in about 15,000 cases of skin disease examined, and represented about two and one-half per cent.; 205 cases occurred in males and 188 in females. Several tables of statistics were presented, showing when the cases first come under observation, and the age at which the attack was first observed. A large proportion of the cases were first attacked with psoriasis between the ages of ten and forty years. In 97 cases the speaker had been able to get reliable evidence in regard to the family history. In 31 cases psoriasis had existed in a near relative, but in 66 cases, the patients felt sure that the disease had existed in no other member of the family.

As regards locality affected, where there is much development it is almost constantly found about the elbows and knees, and more frequently on the extensor surfaces than on the flexor.

Well-marked cases are readily diagnosed, but in some cases there is considerable difficulty in making the diagnosis. It is most frequently confounded with some form of eruption resulting from constitutional syphilis. When psoriasis affects the scalp, its appearance is often similar to that of secondary syphilis. In psoriasis, however, the patch consists simply of epithelial cells, and there is no hyperæmia connected with it. In syphilitic eruption the crust will contain other elements than epithelial cells, and on removal of the crust spots of moisture will be detected. A characteristic symptom of psoriasis of the scalp is a band of hyperæmia, about three-fourths of an inch wide, extending around the forehead contiguous to the hair. This is a point of value in the diagnosis between eczema capitis and psoriasis. In the former affection this band is wanting. Psoriasis is not accompanied with enlargement of the post-cervical glands, as is eczema. The diagnosis from favus is made by the age of the patient, the evidences of destruction of the hair-follicles in favus, and the microscopical examination. The speaker had never been able to satisfy himself that psoriasis of the scalp ever caused permanent loss of the hair.

On the general integument syphilides are most apt to resemble psoriasis. The regions on which the eruptions appear is important. The syphilides are apt to affect the flexor surfaces, while the psoriasis affects more commonly the extensor aspects. Psoriasis begins as a mi-

nute point of hyperæmia, which may last for several days. In macula syphilide a crop of macules appear within twenty-four or forty-eight hours. When the eruption fades there is in syphilis a decided pigmentary change. In squamous syphilis the epithelial scales differ from those of psoriasis. In some cases of psoriasis there is severe itching, leading to scratching of the skin, and as a result scabs and crusts make their appearance, but here the cause of the condition is readily recognized.

The amount of pruritus complained of in psoriasis varies, but it is rarely a prominent symptom, although in exceptional cases it is very severe. He had never seen any eruption on the hands or feet resembling psoriasis, with the exception of eczema, which was not syphilitic.

In regard to treatment, some cases do well, while others do not. There is no specific. What will benefit one case may make another worse. In my experience, tarry preparations, especially the oil of cade, have been most efficacious. Great comfort may be afforded by the use of emollients. Cod-liver oil is one of the best applications. Cod-liver oil and oil of cade (equal parts) is a common prescription. Chrysarobin is a powerful remedy, but has the disadvantage of destroying the clothing. On the face and scalp it is apt to produce dermatitis. The internal administration of arsenic in some cases is of benefit. Even after apparent recovery there is great danger of relapse.

Dr. L. A. Duhring said the reader of the paper, in referring to the diagnosis, did not allude to the difficulty sometimes experienced in diagnosing seborrhœa capitis from psoriasis. He had found considerable trouble in the diagnosis, particularly in young girls. In these cases the eruption was confined to the scalp.

Dr. A. R. Robinson, in the diagnosis of favus and psoriasis, did not agree with the author in one of his points of diagnosis. In the early stage you do not find moisture when the crust is removed. There is a shiny appearance. It is only in advanced stages that ulceration is present.

He agreed with the speaker that psoriasis always occurs in small spots, at first not covered with scales. He considered it primarily an affection of the rete. While it is true that psoriasis often disappears without producing pigmentation, yet there may be discoloration found on the lower extremities, particularly where there is a varicose condition of the veins. In some cases where there are only a few patches of psoriasis, limited to the lower extremities, it is often difficult to make the diagnosis, unless there is involvement of other parts of the body or you have the history. There are other cases of acute psoriasis which closely resemble acute eczema.

Dr. J. C. White, of Boston, agreed with the previous speakers in regard to the difficulty of diagnosing between psoriasis of the scalp and seborrhœa. In some cases the diagnosis cannot be made for months. In all parts of the body pigmentation may follow psoriasis, but never over large areas.

He called attention to one termination which he had seen in three cases, and that was a degeneration into epithelioma.

Dr. R. B. Morison, of Baltimore, had seen many cases of psoriasis, and could only recall one or two cases of psoriasis in the negro. In such cases there is a loss of pigment.

Dr. G. H. Fox, of New York, had been very successful in the treatment of psoriasis and its management; he adopted the teaching of the late Tilbury Fox, who laid stress on the point that in psoriasis the first thing to do is to lessen the congestion of the skin. This is done by restricting the diet, giving fruits and vegetables in the summer, and in the winter giving a carefully restricted diet. Tea, coffee, tobacco, and stimulants of all kinds are to be cut off. By so doing more will be accomplished than is obtained by using arsenic and local applications at the start. In regard to local remedies, he never used tar in the treatment of psoriasis. With the application of chrysarobin, made at the proper time, there is no necessity for the use of tar. Sometimes the drug did no good, but this was because the application was made when the patches of psoriasis were in a congested condition. If the acute congestion is lessened, chrysarobin will produce beneficial results.

Dr. C. Heitzman, of New York, said one of the most important points after making the diagnosis is to decide as to the acuteness or chronicity of the affection. If it is acute, local applications are to be avoided. If the case is chronic, chrysarobin may be used with advantage, at least temporarily. It is not a cure. Tar cannot be dispensed with. Chrysarobin remedies the disease for a time, but in a few months it returns. There is nothing like tar to prevent the recurrence. No mention had been made of pyrogallic acid, which does good in some cases.

Dr. W. A. Hardaway believed that in psoriasis we have a disease situated in the skin itself. It is frequently hereditary. The same sort of skin may be transmitted, just as a certain color of the hair, or of the eye, may be transmitted, and then any exciting cause may develop the psoriasis. Traumatism is frequently the exciting cause. Psoriasis sometimes follows eczema. It is not unlikely that in seborrhœa of the scalp there may be the development of psoriasis. Internal causes may produce it. He had seen the excessive use of oat-meal produce typical psoriasis. As a local application he believed that chrysarobin, with salicylic acid, was very useful in chronic cases. Arsenic is useful on account of its action on the skin. He had employed chrysarobin in liquor gutta-percha, and in gelatine paste. This treatment may be followed up by the application of sulphur ointment. In psoriasis of the scalp sulphur is quite an efficient remedy.

Dr. J. C. White, of Boston, reported

TWO CASES OF ANGIOMA PIGMENTOSUM ET ATROPHICUM.

The first patient was a young man, seventeen years of age, and a Russian Pole by birth. Freckles appeared on his face before he was two years of age. These increased in number until the age of six. When the telangiectasic condition first appeared was not noted. When seen the patient was well developed, and apparently in good health. He had, however, grown slowly, and was then no larger than a boy of twelve. The hair of the head was abundant and intensely black. The eyes were also black.

Present condition, melanosis. The forehead and lower portion of the face were of a dark-brown color, and on close inspection small spots of a darker color were seen. The whole trunk was as dark as the skin of a dark Spaniard. The scrotum was very black, and the penis and glans presented dark spots. The arms and hands were thickly spattered. The legs were also affected. On the right thigh there was one spot of dark color, covered with rather long hair. The mucous membrane of the mouth and pharynx was free from melanosis.

The atrophic condition: On the right side of the face occupying one-half the surface, was a sharply defined area of white cicatricial-looking skin. Similar areas were seen on the other cheek, forehead, and about the mouth. A few white spots were seen on other portions of the body. The sensibility of the affected areas was decidedly lessened.

Telangiectasis: Over parts of the face there were bright red spots, varying in size from a pin's head to a pea. They were most noticeable in the atrophied portions. Within the lids there were two angiomatous new-growths. Several vascular twigs were also seen on the face. A few red points were found on the general surface.

The second case was a brother of Case I., aged three years, born in New York. When eighteen months old little colored freckles were noticed on the face. Since then the condition has been developing. His hair was

dark brown, and his eyes black. The face was covered with numerous dark-brown freckles. The spots were so close together that at a little distance the skin had a uniform color, in some places the spots were slightly elevated. The backs of the hands were covered with dark-brown spots, elsewhere the skin was clear. There were no leucodermic spots, and no angiomatous condition.

From a study of these cases Dr. White concluded that in the beginning the development of the spots could not be distinguished from ordinary freckles. Gradually the spots multiplied until they involved a considerable portion of the skin. It was probable that several years might elapse without other manifestation of the disease. The telangiectasic condition was probably secondary. In the first case it was most developed in the atrophic portion. It was probable that in this case there would be hypertrophy of the epithelium, and final transformation into epithelioma. This had been the result in the thirty-three cases which had been reported.

WEDNESDAY, AUGUST 26TH—FIRST DAY—EVENING SESSION.

DR. J. N. HYDE, of Chicago, read a paper on

RELATIONS OF LUPUS VULGARIS TO TUBERCULOSIS.

The following clinical facts were cited in support of the view that lupus vulgaris was not the result, as had long been taught, of tuberculosis or other systemic diatheses, but was the product of a local infection by bacilli, entirely unassociated with any constitutional evidence of diathesis or predisposition: 1. The unimpeachable character of the family record in by far the larger number of cases of lupus vulgaris. 2. The fact that the disease is, in its inception, a disorder of the period of childhood, when, for the most part, the habits of the child are favorable to infection. 3. The several sites of predilection are those most favorable to such infection. 4. The failure of the disease to spread by inheritance. 5. The remarkable tendency of lupus vulgaris to cutaneous limitation.

DR. J. C. WHITE, of Boston, read a paper entitled

THE TREATMENT OF LUPUS BY PARASITICIDES.

The doctor reviewed briefly the evidence in favor of the parasitic nature of the affection. All previous plans of treatment which had proven most successful were those which would have the effect of destroying any parasite which might be present.

A number of cases were then reported, in which the local use of corrosive sublimate, in the strength of two grains to the ounce of water or unguent, had been used with beneficial results. The ointment was especially recommended. It had been rarely necessary to prolong treatment over two months. As regards the permanency of the cure, the author was unable to speak, as the experiments had been continued for only eighteen months.

DR. SHERWELL expressed his profound disbelief in the parasitic nature of the disease.

DR. WIGGLESWORTH suggested that the oleates might be more efficient than ointments, on account of their penetrating power.

The next paper was by DR. W. A. HARDAWAY, of St. Louis, on

THE TREATMENT OF PORT-WINE MARK BY ELECTROLYSIS.

In the treatment of this affection the object is to excite sufficient inflammation to cause occlusion of the vessels. Electrolysis seems to be the most convenient way of doing this. At first the speaker had used a bundle of needles, but now he employed only the single needle. It is important to allow a period of some weeks to elapse between the applications. The histories of three cases were given in which this method had been employed.

DR. WIGGLESWORTH had seen good results from cutting the vessels in two places and using a preparation of iron, thus closing up the dilated vessels.

DR. FOX thought that better results could be obtained by electrolysis than by other measures, but it did not remove the trouble entirely.

DR. DENSLOW had recently seen a case of port-wine mark on the labia majora of an infant. This had ulcerated when the child was brought to him. As a temporary measure he applied liquor gutta-percha. In two days, without other treatment, the whole mark sloughed out, leaving nothing but a simple ulcer, which completely healed in the course of three weeks.

DR. HARDAWAY said that the advantage of the electrolysis was that it was manageable. A practical point might be referred to, and that was, if after the operation the part should be frequently mopped with hot water the inflammatory disturbance would be greatly lessened.

REMARKS ON A MOOT POINT IN THE ETIOLOGY OF PSORIASIS

was the title of a paper by DR. S. SHERWELL, of Brooklyn. The speaker had been struck by the great diversity of opinion in regard to the general health of those affected with psoriasis, and in order to arrive at something like a consensus of opinion on the subject, he had referred to the writings of most of the authorities on dermatological matters. Brief extracts from various writers were then given. The evidence thus obtained strengthened the doctor's opinion that the patients with psoriasis were generally in good health. He thought that the theory of Piffard, who believes that the rheumatic diathesis is a great exciting cause of psoriasis was the most rational theory that had been advanced.

THURSDAY, AUGUST 27TH—SECOND DAY—MORNING SESSION.

At the business meeting officers were elected as follows:

President—Dr. E. Wigglesworth, of Boston, Mass.

Vice-Presidents—Dr. I. E. Atkinson, of Baltimore, Md., and Dr. A. R. Robinson, of New York, N. Y.

Secretary—Dr. G. H. Tilden, of Boston, Mass.

Treasurer—Dr. H. W. Stelwagon, of Philadelphia, Pa.

Dr. E. B. Bronson, of New York, was elected to membership.

The next meeting will be held, beginning the last Wednesday of August, 1886, at Indian Harbor Hotel, Greenwich, Ct.

DR. G. H. FOX gave a brief description of two cases of

DYSIDROSIS.

The first patient, for want of a better term, he classed under this heading. The patient was twenty-nine years of age, and had always perspired freely. Four years ago the eruption began on the palms of the hand and had persisted. The soles of the feet had also been affected at one time. The skin of the hands was decidedly thick and had a dark hue, and was dotted with numerous elevations of epidermis, averaging in size that of a hemp-seed. The patient had never seen any moisture in connection with this. There had been no itching. The skin never peeled off. Puncture with a needle revealed no serum or fluid of any kind.

The second case was that of a woman, aged forty-five, a cook, whose general health was good. The present trouble began five years ago. The eruption is on the face and consists of numerous large and small vesicles containing clear fluid.

DR. A. R. ROBINSON, of New York, read a paper on

MYCOLOGICAL STUDIES IN TINEA FAVOSA AND TINEA TRICHOPHYTINA.

The speaker prefaced his paper with a few general remarks. The epidermis of different individuals differed in susceptibility to these parasites. Children were more apt to suffer with tinea trichophytina and favus, while adults more frequently presented tinea versicolor. All

children are not equally susceptible. In many cases of parasitic disease there is impaired vitality previous to the development of the affection.

The speaker then gave an account of his investigations to determine the exact anatomical seat of the parasitic diseases in question, and to determine the changes which they produced in surrounding tissues. The conclusion was that in favus the rete is not affected until the later stages, when ulceration had made its appearance. The parasite confines itself more particularly to the corneous layer. The parasite of tinea trichophytina in some cases passes down into the rete, while in others it does not.

A number of sections were shown under the microscope, which illustrated the points brought out in the paper.

Dr. White did not agree with the speaker in the importance of depressed general health as a factor in the production of these diseases. He had never seen any necessity for internal treatment in these cases.

Dr. Piffard agreed with Dr. Robinson that there was a relation between the condition of the general system and the rapidity of development and rapidity of cure.

Dr. Duhring had always held the view that a particular condition of the epidermis was necessary for the growth of the fungus. The majority of cases of obstinate ringworm that he had seen had been in individuals in poor health, but there were exceptions to this rule. What this peculiar condition of the skin was had not been determined.

Dr. Denslow had recently seen a large number of cases of ringworm of the head and beard, but all the patients were well-developed, muscular subjects. These were cured without internal treatment.

The next paper was

ON THE STRUCTURE OF THE DERMA AND THE DEVELOPMENT OF ELASTIC TISSUE IN IT,

by Dr. C. Heitzman, of New York. The essayist drew attention to the fact that Professor Stricker, of Vienna, the acknowledged best microscopist of Europe, has now accepted his views concerning the life of basis-substance. Dr. Gartner (who was present at the meeting), Stricker's assistant, has brought from Europe an electric picture microscope, by means of which these newly discovered facts can easily be demonstrated to a large audience upon a screen. There are three varieties of basis-structure, differing from each other in their chemical constituents, viz., the glue-yielding basis-substance proper, producing the spindles within the bundles of so-called fibrous connective-tissue; the cement-substance between the spindles; and the elastic-substance developing along the edge of the bundles in advancing age and in some tumors. All three varieties are traversed by a delicate reticulum of living matter in connection with the protoplasmic cords that fill the interstices between the bundles in the shape of a comparatively coarse reticulum. Thus it becomes intelligible that in morbid processes not only the protoplasm but also the basis-substance participates in an active manner. After the liquefaction of the solid fields of glue-yielding basis-substance, the bundles directly are transformed into inflammatory corpuscles, from which starts every physiological and pathological new-formation.

Dr. W. A. Hardaway described a case of multiple myomata of the skin, accompanied with severe pain. The patient was thirty-six years of age, married, with healthy children, and good family history. Never had syphilis. Present trouble began a year ago. Changes in weather produced pains in the parts which have since become affected. To relieve these, firm pressure was made with the hand. Between the paroxysms pain was not produced by pressure. Later the lesions presented themselves.

Present condition: A strong hearty man, a pedler by occupation. The pains still persist, recurring at intervals of one night to a week. Each attack lasts two or three minutes and does not return the same night. The growth is situated on the right side of the back, in the mid-dorsal region, and the course of the growths is obliquely outward. There are one or two of the elevations on the left side. Three of the growths are as large as peas, others are small. The epidermis is not abnormal. On passing the hand over these growths there is no hyperæsthesia, but on deep pressure in the neighborhood of the larger masses the patient sinks moaning to the floor. One of the larger growths was removed and microscopical examination showed it to be composed of smooth muscular fibre.

From a clinical standpoint the case bears a close relation to the cases of neuroma which have been reported. The speaker concluded that certain new-growths in the skin, accompanied with severe pain, may be widely different histological structures. We are not justified in assuming that a painful tumor of the skin is a neuroma or fibro-neuroma simply from its clinical history, without a microscopical examination.

Dr. R. S. Morrison, of Baltimore, Md., reported

AN UNUSUAL CASE OF TYLOSIS OF THE HANDS.

The patient was a negro, aged thirty-two, muscular, well developed, and apparently healthy. By occupation he was a fireman of a steamer, and had occupied this position for ten years, shovelling coal with the right hand grasping the upper portion of the shovel, and the left hand sliding up and down the handle. Two fingers of the left hand are worn off to the second joint, while the other two are going in the same way, the nails having nearly disappeared. On several occasions he has drawn pieces of bone from the fingers. There has been no pain at all connected with the affection. On this hand there are some large blisters, underneath which there are red granulating surfaces, which are painless. There is no history nor evidence of syphilis. Specific treatment has been used without effect. The man obstinately refuses to give up his work, so that little could be done in the way of treatment.

The speaker was led to consider it a strictly local affection from the fact that the hand which was most exposed to rubbing and to the heat of the furnace was the one most affected.

Dr. Duhring was inclined to consider the callosities a secondary condition. The occupation probably had something to do with the aggravation of the disease, but if the occupation had been different there would probably have been a similar change. He would regard it as dependent on some deep change in connection with the nerves, similar to what occurs in perforating ulcer of the foot.

Dr. Morrison could not admit that it was an affection of the nerves in the first place. It might be that the continued congestion of the skin, dependent on his occupation, produced changes in the nerves or other parts, which culminated in this affection. In referring to the literature of the subject, he had found similar cases attributed to mechanical irritation.

THURSDAY, AUGUST 27TH—SECOND DAY—EVENING SESSION.

Dr. L. A. Duhring, of Philadelphia, read a paper on

THE RELATION OF HERPES GESTATIONIS AND CERTAIN OTHER FORMS OF DISEASE TO DERMATITIS HERPETIFORMIS.

Dr. Fox exhibited a photograph of a case which might be mistaken for dermatitis herpetiformis, namely, erythema multiformis. This disease should be placed in strong contrast with dermatitis herpetiformis.

MYCOSIS FONGOÏDE,

was the title of a paper by Dr. G. H. Tilden, of Boston, Mass.

The speaker described the case of a man, aged twenty-eight. When he came under observation, three years be-

fore, several red desquamating spots had been observed on the elbows. Several months later erythematous spots, accompanied with pruritus, were noted. These lesions retained a dry, scaly character. There were no vesicles or pustules. At the end of a year several red nodules appeared on the face and throat; these, however, disappeared. Later a small papule appeared on the right thigh, and increased in size. From this there exuded a thin fluid. This was followed by the development in many parts of the body, particularly the axillæ, groins, and neck, of similar lesions, in some cases reaching the size of a hen's-egg. After a time there was superficial erosion of some of the tumors, but these excoriated tumors remained firm in consistence. But some of the masses which were covered with epidermis were soft, but there was no evidence of the formation of pus. There was also indolent enlargement of the lymphatic glands. The general health continued good. The patient passed from observation, and died at the end of three years and a half.

The report of the microscopist who examined the tumors was read. His opinion was that the growths consisted of the formation of lymph-tissue in corium.

Reference was then made to the literature of the subject, and the various cases, some thirty in number, which had been reported, were given, and the symptoms and course of the disease was described. Sections of the growth were also presented for examination.

Dr. White said that this patient was under his care during the last stages of the disease, and he presented the changes which have been described. Some of the larger growths disappeared. During the last months of his life the man was taking arsenic. Death resulted from the occurrence of diarrhœa.

Dr. Fox said one or two similar cases had been seen in New York. Should one come under his care, he should try the effect of Calamooga-oil. Judging from its effects in other cases it should be useful.

Dr. Heitzman remarked that the description of the microscopic appearance was that of a lympho-sarcoma, and the examination of the specimen confirmed him in the view that this was a case of lympho-sarcoma.

Dr. Sherwell, to show the amount of involution that may take place, reported a case of melano-sarcoma under his care. The man was treated with arsenic, mercurials, etc. After six months' treatment the tumors had almost entirely disappeared. There was not the slightest evidence of syphilis.

Dr. Fox had seen Calamooga-oil used in a case of leprosy. There was now not a trace of leprosy except the contraction of the fingers, which is, however, a secondary condition. It had failed in many cases, but there was sufficient to justify a trial of it in the chronic inflammatory affections referred to.

Dr. L. N. Denslow, of St. Paul, Minn., read a paper on

Urethral Irritation in the Male as a Cause of Certain Neuroses and of Acne.

He prefaced his remarks by a brief review of the cases of contracted meatus reported by Dr. Otis. He then gave an account of a number of cases coming under his observation in which there were reflex conditions associated with conditions of the urethra, such as contracted meatus, stricture, and excessive sensitiveness of the prostatic urethra. In these cases removal of the urethral trouble produced an alleviation or cure of the affection, to which attention had been directed. He also reported four cases of acne, in which the same treatment had been followed by marked improvement or cure of the skin disease. In some of the cases ergotin was also employed. The speaker said that he simply reported the cases as so many observed facts, and did not express any theory. He would keep the cases under observation, and at a subsequent meeting give a further report.

Dr. Hyde said many of these cases with urethral trouble associated with acne were patients who probably had been taking for some time balsamic preparations, and as a result they had the development of acne. He would suggest to Dr. Denslow, that he take this point into consideration.

Dr. Denslow said in all the cases reported the acne had existed since puberty. The patients were not hypochondriacs, and they were not masturbators. He was satisfied that no drugs had been used in any of them.

Friday, August 28th—Third Day—Morning Session.

Dr. C. Heitzman, of New York, read a paper entitled

Remarks on Electrolysis and Other Practical Topics.

The reader spoke very highly of electrolytic depilation. For this purpose he uses the Leclanché battery. Six cells of this battery have the advantage of steadiness, lack of pain, and lack of reaction when applied to the face of the patient. He employs a needle devised by Leiter, of Vienna, which permits the depth to which the needle penetrates to be measured. He has had good results from electrolytic destruction of dilated blood-vessels in the face, less satisfactory results in the treatment of port-wine marks, where a permanent cure is only exceptionally attainable. Sodium ethyl is highly recommended by some for the destruction of angioma of the face, but it is in no way superior to nitric acid.

The speaker maintained, after observing two hundred cases of falling off of the hair, caused by seborrhœa, that the method he recommended in 1876 gave fair results. This is the application of a ten or twenty per cent. ointment of crude oleum rusci in vaseline and paraffine.

For the removal of freckles, the doctor used an ointment recommended to him by Wertheim, of Vienna. The preparation is as follows:

℞. Hydrarg. ammon. muriat..	3.75	grammes.
Magist. bismuthi	3.5	"
Ungt. glycerina	30.0	"

M.

This is to be applied in a thin layer, every other night and in four or six weeks the result is highly satisfactory. As to the permanency of the cure the doctor was unable to state.

In regard to the reappearance of hair after removal by electrolysis, the speaker considered it to be due to the growth of the fine hairs, which was increased by the transference to them of the nutrition which should have gone to the hairs removed.

Dr. Hyde thought that Dr. Heitzman had touched upon the important point in the removal of hair by electrolysis. The question was not what will the result be at present, but what will it be in the future. The electrolysis produces a hyperæmia which tends to stimulate the growth of the remaining hair.

Dr. Fox had used nitric acid in the treatment of angioma, making the application in the form of small dots one-fourth to one-half an inch apart, with great advantage. In one case in which a nævus occupied half the body, he used this treatment with much success. He did not think that the removal of hairs increased the growth of others. In one case, that of a young woman with a strong beard, he removed, by actual count, eight thousand hairs. This process required two or three years. Since then it had been necessary to remove only a few dozen hairs.

Dr. Robinson had used a similar ointment for the removal of freckles, but its effect was only temporary.

Dr. Wigglesworth remarked that for the past fifteen years he had used the following ointment, which was almost identical with that mentioned by Dr. Heitzman:

℞. Hydrarg. ammon	10	parts.
Bismuthi subnitratis	10	"
Vaseline	100	"

M.

Dr. Hardaway had performed the operation of electrolysis for ten or twelve years. He employed the iridoplatinum needle, which could be bent and was not likely to pass through the follicle-wall. The moment the follicle was entered there was escape of serum. One case, that of a woman with a heavy black beard, had been entirely relieved. Electrolysis with a fine needle affords a method of getting rid of freckles. The plan is to dot the needle over the surface covered by the freckles.

Dr. Heitzman said that the percentage of recurring hairs is greater in some situations than in others. In the submaxillary region it is greatest.

Dr. R. W. Taylor, of New York, read a paper

ON SYPHILITIC REINFECTION.

The speaker first referred to the literature of the subject, and gave a brief review of the authentic cases on record, giving the names of the reporters. The number of cases previously reported number between thirty and forty. To these the speaker added the histories of three more. A fourth case had been observed by him, but as the complete history was not prepared it was not given.

Case I. was a barkeeper, twenty-five years of age. Was first seen 1868, suffering from gonorrhœa. Three years previously had had indolent enlargement of the lymphatic glands in the groins. Examination showed the presence of lymphatic enlargement in certain regions. Inquiry into the history showed the existence of a chancre three years before, which had been slow in healing. About two months later, he became sick and suffered with a roseollar eruption, sore throat, falling off of the hair, and rheumatic pains, worse at night. Under treatment he improved, but afterward exhibited a papular eruption. He was then seen by Dr. Van Buren, who pronounced the case one of syphilis, and ordered mercurial treatment. He recovered after two years, but of his own accord continued the treatment two years longer. He then remained well until the attack of gonorrhœa. In February, 1870, he again appeared presenting a typical indurated chancre on the cutaneous aspect of the pubes. It presented every evidence of a primary infection. Later a papular syphilide appeared, over the body. There were several mucous patches on the pillars of the fauces, and the throat was red and swollen. The joints soon became the seat of nocturnal pains. The patient also presented a form of syphilitic epididymitis. Under mercurial treatment there was some improvement, but a year later there were some tertiary manifestations. By 1874 he seemed very well. During the next three years there were no evidences of syphilis, but he continued the mixed treatment. He was again seen in the fall of 1882, when it was learned that his good health had continued, and that he was the father of a healthy child. The child was examined and no evidence of hereditary syphilis detected.

Case II. had in June, 1873, a typical indurated chancre, followed by distinct secondary symptoms, which disappeared under treatment. He then passed from observation. In February, 1874, he presented several ulcero-tubercular lesions on the outer aspect of the forearm. He then remained under treatment six months. In January, 1875, he had spots of thickening of the periosteum of both tibia. He was again treated with benefit. In June, 1876, there was a typical indurated nodule on the prepuce, from which indurated lymphatics extended to the inguinal lymphatic glands. The incubation of this sore had been about twenty days. This was followed by malaise, sore throat, swelling of the post-cervical and epitrochlear glands. Over the body and arms there was a fine mottling of light pink color. The patient then went to Europe and was not seen until March, 1885, when it was learned that the symptoms had been well marked, and that he had been under treatment for them with several Continental physicians.

Case III., aged forty-one, had had a typical indurated chancre in 1874. There had been inguinal adenitis, followed by roseola, falling off of the hair, and later by severe iritis of the right side. He was treated with mercury. In February, 1882, he returned with a typical hard chancre. In April he became sick, had rheumatic pains and a mixed eruption of erythematous and papular syphilide. In May, inflammation of the iris of the right eye again appeared. In 1883 he had a late secondary rash.

These cases were reported with the object of throwing some light upon the natural history of second infections of syphilis. In all these cases relapsing indurations were carefully excluded.

Dr. W. H. Stelwagon, of Philadelphia, reported some

OBSERVATIONS ON THE OLEATES.

Of all the oleates, those of mercury, zinc, bismuth, and lead had a place in the treatment of diseases of the skin, and in view of their costliness, the seeming unavoidable frequency of badly made preparations, the disagreeable oleic acid odor, and the irritation so frequently observed following their use, it was probable that of these four the mercuric oleate alone promised to retain a permanent value. This last was especially valuable in ringworm of the scalp, but for inunctions in the treatment of syphilis it was of doubtful utility, as it was questionable whether it was absorbed. Oleate of copper, which had been so highly recommended for ringworm of the scalp, was not comparable in that affection to oleate of mercury, or to tar and sulphur preparations.

Dr. Wigglesworth had practically renounced all oleates except the oleates of zinc, lead, and mercury, as parasiticides.

Dr. Duhring's experience with these preparations was in accord with that of the reader of the paper. He had employed the oleate of copper in varying strengths in thirty or forty cases of ringworm, but it seemed to exert no influence whatever. These were, however, obstinate cases. As to its efficiency in acuter forms of ringworm he was not prepared to speak.

Dr. Heitzman had tried the oleate of copper in chronic cases of ringworm without any result, but in the acute cases it cured after a time. It was not as efficient, however, as the preparation recommended by Dr. Taylor, that is, four grains of bichloride of mercury to the ounce of tincture of myrrh.

Dr. Fox remarked that it had been claimed that the oleic acid and animal oils were better absorbed than these other preparations. As a matter of experience, he had found that vaseline made a better base for the majority of ointments than the animal oils. Vaseline was a most soothing application to the skin.

Dr. L. N. Denslow, of St. Paul, Minn., reported

A CASE OF SYPHILITIC APHASIA AND PARAPLEGIA, FOLLOWED BY DEATH—WITH AN ACCOUNT OF THE AUTOPSY.

The object of the author was simply to put on record a case in which an autopsy was obtained in early syphilitic cephalgia. The patient was seen in consultation April 29, 1885. Two months previously the patient had begun to suffer with severe headache, worse at night. There was also a papular eruption. He acknowledged the existence of a sore six months previously. Iodide of potassium with chloral had been given two weeks later; the patient was free from pain, but it returned one month afterward when the patient stopped taking medicine. Iodide of potassium was again given with the effect of relieving the pain. Aphasia and paraplegia then developed, and the patient died four days later, and within nine months of the initial lesion.

At the autopsy the dura mater along the superior longitudinal sinus was thickened and adherent, there were numerous small gummata in the pia mater situated along the right border of the longitudinal sinus, and extended back to the fissure of Sylvius. The pia mater exhibited the evidences of simple acute iinflammation.

The Association then adjourned.

Strabismus.—Dr. Samuel W. Francis says that squinting is caused by micro-cock eye!

Correspondence.

OUR LONDON LETTER.

(From our Special Correspondent.)

SPECIALISM—THE OPPOSITION TO IT AND THE ARGUMENT FOR IT—THE BRITISH MEDICAL MEETING—ECHOES OF DISCONTENT.

LONDON, August 29, 1885.

THE subject of specialism is again being discussed, and, as usual, with some animus. It is one of those questions which is always coming to the front and being argued afresh, though each sucessive discussion usually does no more than leave matters *in statu quo*. *The Lancet* decided against specialism and specialists years ago, but the specialists continue to live and thrive in spite of *The Lancet*. The profession, at last, finding that they could not put down specialism, finally made some concession by establishing special departments at the general hospitals. Specialism was thus in a manner recognized and taken under the wing of the general hospitals. Eye diseases had long been acknowledged to constitute a legitimate specialty, but by this step other specialities were recognized as such. The "special departments" gradually increased in number and efficiency, until now most of the general hospitals in London—at any rate, most of those attached to medical schools—have them in the chief special branches. This has not, however, in any way lessened the number of special hospitals; the latter flourish in undiminished numbers. The fact is the public believe in specialism, and go to the specialists. They will, doubtless, continue to do so, whatever the general physicians and surgeons may say. From one point of view their argument is unanswerable. How, say they, can a man who practises all branches of medicine or surgery know as much about one particular branch as a man who devotes his whole time to that branch? In the case, at any rate, of those branches of practice which require considerable manipulative skill—such as ophthalmology, otology, laryngology, and, I might add, urethral surgery and operative obstetrics—the answer is self-evident. In the case of ophthalmology the question has long been settled in favor of the specialists. Take one of the others, though: a patient suffering from an aural exostosis, say, would naturally prefer to be operated on by an aurist who had previously done half a dozen or more similar operations, rather than by any general surgeon—however good as a general surgeon he might be—who had never done one. A patient suffering from a severe stricture, too, would rather have a bougie or catheter passed on him by a specialist who passed a score or more daily, rather than by a general surgeon in whose practice urethral cases did not form a tithe of those seen. The profession, too, believe in specialism. Many of them do, at any rate, for they send their patients to the specialists, and this not only among the general practitioners, who might perhaps be accused of not knowing any better, but also among consulting physicians and surgeons who have plenty of colleagues living within a few doors of them whom they might call in consultation if they would. In truth, many general physicians and surgeons are themselves more or less of specialists. They would, doubtless, repudiate the term with scorn. Yet a very large number of them have, without becoming out-and-out specialists, devoted a disproportionate attention to some special branch, have perhaps written on it, and finally find that their practice largely consists of certain groups of cases. Look, for instance, at the number of physicians who have written on chest diseases. Many such have found their practice become mainly, if not exclusively, a chest practice. Are not these specialists? Certainly they are, to a limited extent.

Moreover, every general physician and every general surgeon is really a living example of specialism, paradoxical as this may sound. Yet this is so. They differ from the so-called specialist merely in degree. The thorough-going specialist would say that that he renounces the pursuit of general medicine and surgery in order that he may study one department more profoundly. He digs within a narrower area in order that he may dig deeper. Is not this what a general physician does, though his specialism is not so exclusive? Every pure physician renounces the practice of surgery and obstetrics, *i.e.*, he restricts himself to one-third of the healing art. Similarly, the pure surgeon relinquishes medicine and obstetrics. Each of them narrows his field of observation that he may explore it more minutely. Most people would admit, that, given two men of equal ability and, at the outset, equal professional attainments, and let one of them become a general practitioner and the other a pure physician, that, at the end of ten years, the latter ought at any rate to know the most *medicine*. The specialist merely carries the subdivision a little further.

Specialism is, however, open to great abuses, and these have justly been denounced. There is always the temptation, whatever the case may really be, to claim it for the particular specialty the consultant cultivates, and where the latter is unscrupulous, this has, no doubt, often been done, and in some cases to the detriment of the patient's interests. It is certainly not legitimate specialism for a laryngologist to retain a case of aortic aneurism even with laryngeal symptoms present, or for an ophthalmologist to keep a patient with Bright's disease even if albuminuric retinitis be present, or for an otologist to treat a case of Ménière's disease. If the practitioner is competent, it may be legitimate practice, but it is not *bona fide* specialism. It is, of course, possible for him to be a good general practitioner, and, in addition, a good specialist in his own specialty. It is, though, to be feared that the assumption of specialism has been occasionally a cloak for ignorance—that, in fact, a specialist has put himself forward as such, simply because he knew nothing else, and, perhaps, not even his own specialty. The abuses to which specialism is liable do not, however, detract from the arguments in favor of it, neither are they confined to specialism alone.

Now that the Cardiff meeting is receding from view and becoming a mere memory of the past, some signs of discontent are being manifested. Those who, when at Cardiff, were too busy in feasting, are now speaking out their minds—some in public, many more in private circles. One gentleman writes to the *Journal*, to complain that many who had promised to take part in discussions failed to appear, and that consequently the said discussions had to be brought to an untimely end. This is very sad, but not novel, and where is the remedy? Another gentleman complains that he has been misrepresented in the *Journal*, and states his case at some length in a rival journal. Dr. Jacob seems so far to have had the best of it. The editor of the *British Medical Journal* has, at any rate, deemed it wisest to maintain a judicious silence on the subject in his own columns. Many are the plaints, as usual, against the Council. It is stated that they can, by concerted action, carry anything. No doubt they can. Well-organized committees usually can. One very evident reason why any matter discussed at the annual meetings is usually settled in the way the Council wishes, is that most of those present apparently care little about the matters discussed, and are willing to leave it to the Council. This was very plain both at Cardiff and at Belfast. On each occasion considerable discussion took place over a proposal to pay the travelling expenses of members of the Council. On each occasion the proposal was negatived by a large majority, but it was painfully apparent on each occasion—and with respect to other questions also—that most of the members present cared nothing about the matter, one way or the other. Some opposition was evinced at Cardiff, to the proposed outlay on new premises, though it was finally sanctioned.

THE ABUSE OF MEDICAL CHARITY.

To the Editor of The Medical Record.

Sir: I have noticed with much interest the discussions in The Medical Record concerning the abuse of medical charities in this city, and it is to be hoped that the agitation will not abate until much of this abuse abates also. The existence of this misuse and perversion of what has been dedicated, in benevolent intent, to the benefit of the *really destitute* is well authenticated in all our large cities. A recent careful investigation made in Philadelphia shows that in one year about two and a half per cent. of the whole population received free in-door hospital treatment in that city, and nearly sixteen per cent., or 150,000 persons, received free dispensary treatment. Repeated tests in New York and Philadelphia, made to a somewhat large extent, have satisfactorily proven that fully two-thirds of this free treatment, in dispensaries at least, was bestowed upon persons fully able to pay a moderate fee to a regular physician. In the face of these facts, are the managing boards of our hospitals and dispensaries not guilty of unpardonable neglect of duty and misapplication of trust funds in permitting such miscarriage of charity?

The attendant disadvantages, also, in the over-taxing of the attending physicians, the injustice to the younger and struggling members of the profession, the disadvantage to the patients in hasty diagnoses and treatment, and especially in the corrupting effect upon the self-respect and independence of the poor, are too patent to require emphasis. The great need is a practicable remedy.

It must be borne in mind that the terms of medical relief should not be the same as those for other departments of charitable aid, inasmuch as the physical suffering, even of the most unworthy, cannot be ignored or neglected, and also because the relief dispensed cannot be readily pawned or traded for drink. The question of the right bestowal of medical relief will turn upon the applicant's pecuniary ability and not upon moral character.

A practicable remedy seems to be offered in New York in the near future, in the methods and system of the Charity Organization Society, a society organized by the State Board of Charities for the very purpose of offering a ready means for the proper protection, regulation, and adjustment of benevolent relief. When this society, which as yet covers only about one half the area of the city, shall be co-terminous with it, it is understood that it will be ready to undertake the investigations of all applicants for medical relief, and to report in ordinary cases upon the same before the second visit. It is even now willing to undertake such examinations within the territory already covered by it (Houston Street to Seventy-ninth Street on the East Side, and Houston to Fifty-third Street on the West Side), expecting that the institutions benefited thereby be willing to contribute correspondingly to the society's support. The results of the experience of the German Hospital and Dispensary in availing itself of the society's co-operation (as shown in The Medical Record of June 13, 1885) are sufficient to show the benefits and the thoroughness of the latter's methods. It is also understood that this society is at present willing to contract with a number of the medical charities to investigate over the whole city for a price sufficient to pay for the actual cost of the work. Its system of central registration of all applicants for relief, now three years in operation, gives an indispensable requisite for intelligent work. It already has registered about 70,000 families of seekers of charitable relief, or over 250,000 persons.

The general plan would be that all applicants for medical relief should apply primarily to the medical charities direct, and be treated upon the off-hand judgment of the medical attendant; and afterward be by him referred, with a card in proper form, to the society for report as to ability to pay before being treated a second time, the report to be made upon the same card. The report is to be a discriminating one, based upon the family income and number and condition of the members; and to state whether the party can pay any fee, or can pay a modified or an ordinary one. Any small *fixed* fee is as indiscriminate and as unjust to the medical institution and its benevolent supporters as no fee at all, and quite as liable to abuse. Under such a plan as is thus briefly outlined, it is believed that the co-operation of the Charity Organization Society could be equitably secured, and this flagrant abuse and perversion of medical charity seriously hindered, if not nearly altogether counteracted.

It may also be added that the same co-operative system of "Charity Organization," so technically called, is gradually spreading all over the country and now exists in nearly fifty of the large cities and towns of the Union. The kindred societies in all these localities are so closely allied that almost daily exchanges of information are made between some of them. This gives each city valuable protection against fraudulent relief askers from all the other towns.

Two examples from the Second Annual Report of the Society in question are to the point.

"Defrauding Hospitals.—Information was received by the Charity Organization Society of the coming to New York, from an interior city of Pennsylvania, of a wealthy man assuming the guise of great poverty, for the purpose of securing free treatment and surgical service for his eyes, for which he was able to pay liberally. The information having been carefully verified by real estate and tax searches, it was immediately sent out to every hospital and dispensary to which he would be likely to apply. He was thus discovered at a leading eye hospital, and in due time confronted with the facts and compelled to pay.

"Another.—A poorly-dressed woman applied to a hospital for surgical treatment, and was reported to the Society. Investigation showed that she was the wife of a prosperous liquor dealer, who owned a valuable corner building in a choice location, the main floor of which was his elegant saloon, and the floors above rented out for high-priced flats. The hospital declined further treatment, and the other hospitals were duly warned."

Yours truly,

For Wisdom and Accountability in Charity.

COMPLICATIONS OF MALARIA.

To the Editor of The Medical Record.

Sir: Dr. Weber, of this city, a painstaking observer, published a paper in The Medical Record, of September 12th which is readable and interesting, also showing good treatment; but it seems to put forward as novel what has been known for a long time, namely, that in all febrile conditions, or fevers, there may be a succeeding determination to the viscera of head, chest, or abdomen; this causing hemorrhages or inflammations.

In the *New York Medical Gazette*, of January 7, 1882, p. 2, is an article by Dr. Thomson, on "Temporary Albuminuria, caused by Malaria;" which albuminuria was dependent on temporary renal congestion from malarial poisoning; intermittent hæmaturia was concomitant. This completely covers the ground taken by Dr. Weber as far as renal hæmaturia is concerned.

Other hemorrhages, of course, are also noted, such as epistaxis and hæmatemesis; I have had such (malarial) cases myself.

The apneumatosis (although prettily differentiated by Dr. Weber) and psychosis can, no doubt, be explained by internal determination. It is well known that malarial patients often temporarily lose complete memory, only retaining partial.

C. E. Nelson, M.D.

109 East Thirty-fifth Street.

Army News.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from September 6, 1885, to September 12, 1885.

McKee, J. C., Major and Surgeon. Sick leave still further extended three months on surgeon's certificate of disability. S. O. 204, A. G. O., September 7, 1885.

Patzki, J. H., Captain and Assistant Surgeon. Assigned to duty as Post Surgeon, Jackson Barracks, New Orleans, La. S. O. 192, Department of the East, September 8, 1885.

Polhemus, A. S., First Lieutenant and Assistant Surgeon. When relieved at Fort McDermit, Nev., assigned to temporary duty at Presidio of San Francisco, Cal. S. O. 87, c. s., Department of California.

Kendall, William P., First Lieutenant and Assistant Surgeon. Relieved from duty at Presidio of San Francisco, Cal., and assigned to duty as Post Surgeon at Fort McDermit, Nev., relieving Assistant Surgeon Polhemus. S. O. 87, Department of California, August 31, 1885.

Medical Items.

A Clever Impostor.—A Russian, who has been going about New Haven, Conn., soliciting alms on the strength of a badly swollen hand, which he told people was caused by rheumatism, was arrested a few days ago. At the hearing it was developed that the culprit was not afflicted with rheumatism at all, but had tied tightly a bandage around his arm, near the elbow, so as to make the blood settle in his hand and produce the swelling. A German present at the hearing said it was a regular trick of ordinary beggars in European cities. The prisoner was sent to jail for sixty days.—*The Medical and Surgical Reporter.*

The Cold Douche in Insomnia.—The following is recommended as a very efficacious means of producing sleep in insomnia associated with eruptive or continued fevers: The patient's shoulders are covered with a cloth and the ears plugged with cotton. Then the head being held face down over the edge of the bed, a fine stream of cold water is dropped upon the neck and occiput. The water should should fall from a height of eighteen inches during a period of three or four minutes. The head is then dried, and the patient made comfortable in bed. As a general rule, sleep follows in a very short time.—*Concours Médical.*

A New Cardiac Sedative.—Dr. G. Bufalini gives an account in the *Gazzetta degli Ospitali*, of August 12, 1885, of some experiments with coptis teeta or mameeran upon the heart of the frog. This plant is a native of China, belonging to the family of ranunculaceæ, and is used as a stimulant of the digestive functions. The author found its effects upon the heart to consist principally in a slowing of the pulsations, leading finally to complete arrest of cardiac action in systole. And he, therefore, classes it in the same pharmacological group with digitalin.

Floating Liver.—Maack relates the case of an unmarried woman, thirty-five years of age, who complained of pains in the right side of the abdomen. She had suffered from these for the past eleven years. Examination showed a tumor, of the shape and size of the liver, situated in the right iliac fossa, and the liver was also found not to be in its proper place. The cause of this mobility was thought to be an old echinococcus cyst of the suspensory ligament.—*Annales Médico-Chirurgicales.*

A Well-preserved Family.—There is an Arab family in Algiers, according to the *Gazette Médicale de l'Algérie*, which consists of Simon Lucas Gimenès, one hundred and eight years old, the father of François, seventy-eight years old, the father of Lucas, forty-six years old, the father of François, twenty-six years old, the father of Lucas, one year old. They are all in good health and all working with the exception of Simon Lucas and his great-great-grandson.

Oranges as a Galactogogue.—A case is reported in *The North Carolina Medical Journal*, of an increased secretion of milk caused by oranges. The patient gave little or no milk, and the child was fed artificially; but soon after eating some oranges she found that the secretion was markedly increased. When the fruit was omitted for a few days the milk was suppressed, but returned again upon the patient's returning to the orange diet.

The Evil Spoken of Physicians.—M. Witkowski has been collecting all the wicked things written about physicians, and has published them in a book bearing the title of "Le mal qu'on a dit des médecins." That we have had to suffer from a rather undue share of slander is evidenced by the fact that two volumes of between three hundred and four hundred pages each have already appeared, and are to be succeeded by still a third.

The Cocaine Habit.—A case is reported by Dr. Love in the *St. Louis Medical Journal* of an opium eater whom he treated with cocaine. He was successful in curing the opium habit, but found that his patient had simply exchanged that for the cocaine habit, and that he was as much a slave of the latter drug as he had been of opium.

Formula for Infantile Coryza.—Dr. Filatow recommends a solution of one part of hydrochlorate of quinine in fifteen parts of glycerine, in the treatment of infantile coryza. Two or three drops are to be applied by means of a camel's-hair pencil to the nasal mucous membrane, three or four times a day.

It is said that manufacturers in Paris are imitating cod-liver oil by soaking herrings in olive oil. The olive oil quickly takes up the fishy odor, and closely resembles light cod-liver oil. Brown cod-liver oil is imitated by allowing the fish to soak in the oil for eight or ten days.

The Health of the French Soldiers in Tonquin.—Reports in the French journals of the health of the army in Tonquin continue to be unfavorable. The greatest mortality is from malarial diseases, which are very prone to assume a pernicious form.

Tuberculosis and Vaccination.—It is asserted by Straus that the proportion of tuberculous calves does not reach 1 in 100,000. If this statement be correct, there would seem to be but very little danger of tuberculosis in obtaining vaccine from these animals.

Oxide of Zinc, according to Professor Peterson, of Kiel, is much preferable to iodoform in the treatment of wounds. It is cheaper, not poisonous, has no offensive odor, and is equally effective as an antiseptic application.

To Arrest Hiccough.—Dr. Ramos asserts that hiccough may be at once arrested by wetting the lobe of the ear with cold water or with any fluid which by its evaporation will produce a slight degree of refrigeration.

Vaccination for Cattle-plague.—The success of Pasteur's method of vaccination for the cattle-plague in India is said to have been brilliant. It was used for elephants, cattle, horses, and sheep.

Honors to Billroth.—Professor Billroth has recently had the exceptional honor of receiving the gold collar and star of the order of St. James from the king of Portugal.

A Free College of Pharmacy has been established in Rio de Janeiro under the auspices of the Pharmaceutical Institute of that city.

The Medical Record

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Original Articles.

ON CEREBRAL HEMORRHAGE.

By IRVING C. ROSSE, M.D.,

WASHINGTON, D. C.

As an indispensable prerequisite to the study of intra-cranial hemorrhage, it is important to know something of the details of the vascular distribution of the brain, and especially of the arterial distribution at its base. The subject has lately been elucidated by Stewart, Duret, Wernicke, and others.

At the outset, it is well to bear in mind as fundamental notions, that the cerebral vessels supplying the convolutions receive their blood from a set of arteries different from those that supply the ganglia and the neighboring parts in the encephalon; that the supply to these ganglia being much more direct, the vascular pressure is here greater than it is in the cortex; and that the vessels of the ganglia and of the cortex do not communicate; each ultimate branch supplying its own area, and for that reason known as terminal. The next point touches the origin and terminal distribution of the groups of nutrient arteries principally concerned in cerebral hemorrhage. The vessels of the antero-median group, given off from the anterior communicating artery and from its proximal parts, ascend into the cerebral substance and supply the front part of the head of the caudate nucleus; the posterior-median group, arising from the posterior part of the posterior communicating arteries and from the posterior cerebrals near their point of origin from the basilar, supplies the internal surface of the optic thalamus and the walls of the third ventricle; the right and left antero-lateral groups, given off from the Sylvian or middle cerebral artery of each side, pass into the brain substance and supply the lenticular nucleus and the adjacent parts of the internal capsule and anterior part of the optic thalami. One of its branches of relatively larger size enters the substance of the caudate nucleus by crossing the upper part of the internal capsule and spreads forward to the anterior part of the nucleus. This branch is known as *Charcot's artery of cerebral hemorrhage.* The nutrient groups, known as the right and left posterior lateral groups, given off from the posterior cerebrals after they have turned the crura cerebri, supply the greater portion of the optic thalami.

The cortex receives its arterial supply from the vessels that form the angles and sides of the circle of Willis; the middle cerebral being the most important of these vessels, since it is this artery and its branches that supply the convolution specially associated with aphasia and the great motor centres of Ferrier, and they are, moreover, the ones most subject to embolic and thrombic processes.

When a rupture of one of these arteries occurs, there results an effusion of blood into the lacerated brain substance or into the ventricles. The hemorrhage is in most all cases from a ruptured artery. It rarely occurs from a vein, and only from traumatic causes or from secondary invasion of the veins. In rare instances the obstruction caused by venous thrombosis may give rise to capillary hemorrhage, and it is also thought that a hemorrhage into the pia mater may ensue from the rupture of varicose veins. In the case of capillary or very minute hemorrhage, there is merely a separation of the cerebral fibres; but when the hemorrhage results from a ruptured artery it is followed by disintegration of a portion of the brain-tissue; by compression; by subsequent irritation and inflammatory changes; and by softening of the portions irrigated by the vessel. The effused blood forms for itself cavities varying in size from that of a pea to an orange, and they generally contain from fifteen to five hundred grammes of blood. The clot is large when the hemorrhage occurs in the ventricles, in the hemispheres, or in the cerebellum; small when in the motor tract. Its seat is more frequent in the right than in the left brain, and the hemorrhage occurs oftener in the corpus striatum and the optic thalami, or in this immediate vicinity, although it may take place in any part of the brain. Next in the order of frequency are the middle, the anterior, and the posterior lobes of the brain; then the cerebellum, the pons varolii, and the peduncles.

It sometimes happens that the effused blood tears through the white tissue and escapes under the pia mater and the arachnoid. It may escape further and be effused into the space between these membranes and the dura mater, or the extravasation may take place into the lateral or the fourth ventricle. The clotted blood, of a dark-red color, of gelatinous and homogeneous consistency and surrounded by a zone of reddish-yellow lacerated brain-tissue, undergoes a gradual change in consequence of the reabsorption of its coloring matter and the disarrangement of its elements. If the hemorrhage has not been very extensive, at the end of one or two months a part of the material of the clot is absorbed by the vessels of the vascular cyst enclosing it, leaving either a linear cicatrix, a reduced discolored clot, or a small cyst filled with reddish serosity or albuminoid gelatinous matter. In the case of a cicatrix resulting from the union of the cyst-walls, it is thought that such a result is owing rather to softening than to hemorrhage. When absorption does not take place a new hemorrhage into the same cavity may occur, or a secondary lesion or an abscess may result. The lesion in cerebral hemorrhage is sometimes multiple, double, triple, quadruple, and even more lesions having been observed, but as a rule in recent extravasations there is only one. Whether a clot be single or multiple, its varying dimensions form a basis for speaking of the hemorrhages as large, small, or medium. The small hemorrhages, resulting from the rupture of capillary vessels, now known as punctiform hemorrhages, are invariably multiple, while those in which the extravasated blood is collected into a mass, or the massive hemorrhages, are generally single. It is rare that the ruptured vessel causing the hemorrhage can be discovered. A miliary aneurism may, however, be found if the hemorrhagic mass be carefully washed out under water.

The history of what are known as secondary changes is so incomplete that a pathogenitic theory of these degenerations cannot be formulated. The secondary changes following hemorrhagic foci of long standing occur, not only in the brain and the cerebellum but in more remote parts, as the pons, the medulla, and the cord, and the change consists essentially of an atrophy of the nerve-fibres and the substitution of connective tissue. General atrophy of the brain is a common variety of secondary change accompanying extravasation into the cortex. There are also found in the paralyzed limbs,

alterations of the nerves, muscles, and the articulations. An interstitial inflammation may occur in the nerves of the paralyzed limbs, the volume of the nerves being increased to twice the size of those on the healthy side; degenerative changes are reported to have occurred in the tactile corpuscles of the skin, and atrophic changes involving the outer and subcutaneous tissue sometimes occur. Muscular atrophy and arrest or retardation of growth in the paralyzed limbs occur in some cases. In the first case the primitive fibres are atrophied; sometimes they have lost their striation, or have undergone fatty degeneration, and the nuclei of the muscular sarcolemmæ are increased. These changes are believed to be consequent upon secondary degeneration in the fibres of the anterior tract implicating the motor cells of the anterior horns of the cord. The articulations of the paralyzed side may suffer inflammation, either acute or chronic, and often occurring as acute synovitis with exudations, or as semi-dislocation of the shoulder-joint, attended with stiffness, pain on pressure, and atrophy. Hyperæmic conditions, or hemorrhages into the pleura or the lungs, the substance of the kidneys and suprarenal capsules, the endocardium, and mucous membrane of the stomach often accompany cerebral hemorrhages; but as these facts touch the changes occurring in these organs, they may be mentioned rather as predisposing causes of the disease.

As regards the etiology of cerebral hemorrhage, experimental investigations so far teach nothing, and the help from physiology is of little or no importance. The chief predisposing causes are to be found in diseases of the walls of the cerebral arteries or of their surrounding tissues; in increased blood-tension, and in certain changes in the composition of the blood. The existence of miliary aneurisms, the result of arterial sclerosis, is the most frequent cause of intracranial hemorrhage. Either primary or secondary fatty degeneration of the arteries, especially the branches of the Sylvian artery, is assigned as the most common cause of massive hemorrhages into the brain. Arterial tension as a cause of rupture is probably a pathogenetic element of secondary importance, an adjuvant or occasional rather than an efficient cause, since it is doubtful whether cerebral hemorrhage can occur from tension without vascular degeneration. In cerebral hemorrhage and albuminuria with hypertrophy of the left ventricle, the arterial tension is considerably increased, owing to the diminished renal circulation, and the arteries are, moreover, diseased in consequence of the dyscrasia. Tension of the cerebral arteries by collateral fluxion may cause hemorrhage on sudden exposure to cold. The tension may likewise be sufficiently raised to produce vascular rupture by all obstacles to the depletion of the encephalic veins. The same action may occur in consequence of a thrombosis of the sinuses, in compression of the jugulars or of the superior vena cava, in alterations of the right heart, and in obstructions to the pulmonary circulation, although it is probable that in these instances the hemorrhage is produced by vascular changes, a proof of which seems to lie in the fact that intracranial hemorrhage is almost unheard of in whooping-cough, epilepsy, and in labor, in all of which conditions the venous stasis reaches a great intensity. Embolism and thrombosis may nevertheless result in softening; and owing to the changed condition of the brain tissue and mobility of the vessels to resist the pressure of the blood, the state of brain-softening may influence the genesis of certain hemorrhages.

In exceptional cases cerebral hemorrhage is met with in leucocythæmia, pyæmia, hæmatophilia, scurvy, icterus, and the adynamic fevers. In the latter case, no alteration being shown to exist in the vessels, it is supposed that the red globules traverse the walls of the capillaries. Hemorrhages from pyæmia and leucocythemia are supposed to be caused by the obstacle which the accumulated white corpuscles oppose in certain points to the circulation and to the resulting excess of tension.

Cerebral hemorrhage, rare before the fortieth year, is most common in the male sex, and occurs generally between fifty and seventy.[1] Exact statistics on the subject are, however, wanting, since hemorrhages have not been made the subject of inquiry, but rather the occurrence of the symptoms traditionally known as apoplexy. An inherited tendency, occupation, climate, altitude, the abuse of opium, alcohol, and tobacco, gout and syphilis, the circumstance of a previous attack, and all causes that momentarily increase the circulation and increase the pressure of the blood, or retard its exit from the head, may equally favor the production of a hemorrhage.

There are striking differences in individual cases of cerebral hemorrhage; but almost all cases present two essential features, namely, suddenness of onset of the initial attack, and subsequent evidences of local cerebral disease with hemiplegia.

Many writers speak of the so-called prodromata of cerebral hemorrhage, which bear a similarity to the group of symptoms that accompany cerebral hyperæmia, or symptoms of diffused vascular lesion that may lead to softening. These symptoms are headache, vertigo, ringing in the ears, muscæ volitantes, vomiting, slight confusion of mind with dysphasia, numbness of a limb or of one side of the body, and various motor and sensory disturbances. Agoraphobia is reported to have been a premonitory symptom in some cases. Disturbances of the vision, as diplopia, neuro-retinitis, and amaurosis, have also been observed to precede attacks of cerebral hemorrhage, and the presence of miliary aneurisms upon the retinal vessels incline to the belief that the same alterations exist in the encephalon, and are therefore a presumption in favor of hemorrhage.

As a rule, the irruption of blood upon the brain is sudden; the patient, in apparent good health, being suddenly struck down by the shock, which causes total abolition of the encephalic enervation, with paralysis of all the limbs, stertorous respiration, deviation of the eyes to one side, and loss of the reflex movements, with the exception of deglutition, respiration, and the movements of the heart. After this state of sopor, the victim of the seizure may die sooner or later. It is rare that cerebral hemorrhage is instantly fatal, unless the extravasation be in the medulla oblongata, or in both hemispheres. In the slighter forms sudden loss of consciousness gives place to other symptoms, a simple onset being attended by paralysis or tonic spasms of the extremities. Epileptiform convulsions sometimes accompany the onset of the extravasation, but this is rare. Other features of an attack are variations of the bodily temperature, the pulse, and the respiration; the appearance of the face, and the condition of the pupils. In the fulminating form, the temperature sometimes sinks to 95.5° F., and may remain lowered until death. In some fatal cases the primary depression may rise steadily until 108° F. is reached. A slow, irregular pulse is most often observed; sometimes it may be just the opposite, and the tension may vary with the case. The respiration is not always stertorous, being sometimes as quiet and regular as that of ordinary sleep, and in some cases it takes on the Cheyne-Stokes character, owing to the depressed action of the respiratory centre. The face is sometimes injected and cyanosed, owing to incomplete hæmatosis; at other times it is quite pale, and the features are expressionless. Occasionally there is nystagmus, and if the hemorrhage has taken place into the pons a high degree of myosis. A marked degree of inequality in the size of the pupils points to unilateral affection of the brain. A temporary symptom in some cerebral hemorrhages is conjugated deviation of the eyes, with rotation of the head toward the side not paralyzed. The deviation does not hold good in all cases. As a diagnostic aid to determine the

[1] It is met with in the lower order of animals, having been observed in monkeys.

site of lesion, it is thought that lateral reflection of the head and eyes, or of the latter alone, points to hemorrhage in the territory of the posterior cranial fossa, or rupture into the ventricles. On the other hand, deflection toward the opposite side points to the hemispheres. Cerebroscopic appearances, such as dilatation and tortuosity of the retinal veins with serious papillary infiltration or retinal hemorrhage, indicate sudden interruption of the interior circulation of the brain.

The further history of cases that survive is that of the disturbances following permanent destruction of the brain-tissue. The most prominent of these focal symptoms is paralysis of voluntary motion, the so-called cerebral hemiplegia. Other permanent symptoms are contractures or hemispasms, hemianæsthesia, hyperalgesia and persistent neuralgic pains, affections of the special senses, trophic and vasor-motor disturbances, such as œdema of the skin and change in its perspiratory function, the pulsus differens, bed-sores, etc.; and more or less impairment of the intellect. The electrical reaction of the muscles of the paralyzed parts remains unchanged, or nearly so. Movements of an athetoid character are sometimes noticed in the limbs. Disturbances of the special senses occupy but a secondary place in the symptomatology of the chronic condition. Anosmia never occurs as a consequence of cerebral hemorrhage; taste and hearing are but rarely affected; and but little definite is known regarding the disturbances of vision. Optic neuritis seldom occurs, but hemiopia or hemianopsia is, however, often present. A lesion of the first temporal convolution on the left side is said to give rise to an auditory disturbance in which sounds are heard distinctly; but the patient does not understand what is said to him, and gives wrong answers to questions. Secondary implication of the corpora quadrigemina is also thought to be a probable cause of such symptoms as amblyopia amaurosis, and mydriasis.

Full mental vigor is seldom regained after an attack of cerebral hemorrhage. Failure of memory is generally the first noticeable mental symptom. Aphasia sometimes occurs; the emotions are under bad control, the patient laughing at inconsiderable trifles, and sobbing at the slightest irritation; and in some cases the intellect declines into childishness and oblivion.

From many of the foregoing symptoms, it is possible, in the presence of certain definite conditions, to decide the position of the hemorrhagic lesion in the brain, if not positively, at least approximately. The science of localization is new, and writers, though agreeing in the main, are not in accord on this subject. In a general manner it has been determined that deviation of the eyes and rotation of the head away from the paralyzed side, indicate which hemisphere is attacked; that convulsions and contractures denote whether the lesion be in the excitable part of the encephalon, that is, the peduncles, the pons, or the cerebellum, and whether the irruption of blood be in the ventricular cavities or on the surface of the encephalon; that the antagonistic paralysis of the limbs, and of the parts supplied by the cranial nerves, permit the localization of the focus in the bulb, the medulla, or the cerebral peduncles, according to the implicated nerve. Beyond this the possibility of locating a hemorrhagic lesion is largely a matter of conjecture. Moreover, it is often embarrassing to differentiate cerebral hemorrhage from embolic or thrombic softening of the brain, which is characterized by many of the same phenomena.

Patients may live for many years after an attack of cerebral hemorrhage, but sooner or later the hemorrhage reappears with fatal effect, or an intercurrent malady, generally pneumonia, may end the life. Others succumb to the enfeeblement brought on by long repose in bed, and the unfavorable hygienic condition resulting from the hemiplegia; paralysis of the bladder and rectum may ensue, with bed-sores, and death occurs from adynamia.

There should be no difficulty in diagnosing cerebral hemorrhage after becoming acquainted with its symptomatology: but there are, nevertheless, several conditions of insensibility that may prove misleading, such as those resulting from intoxication by alcohol or opium, the coma uræmia, or of epilepsy, and the profound insensibility following injuries of the skull cerebra' hyperæmia, arterial obliteration, encephalitis, meningeal hemorrhage, and intracranial tumors. An attack of syncope, of asphyxia, or of hysteria may often complicate the diagnosis. To distinguish the foregoing affections from cerebral hemorrhage, it is necessary to compare their fundamental symptoms with those of hemorrhage in connection with attending circumstances and the patient's antecedents. Nevertheless, it is often impossible to diagnosticate a cerebral hemorrhage with effusion into the ventricles or under the meninges from a submeningeal hemorrhage without alteration of the encephalon, since the symptoms of a cerebral hemorrhage are sometimes reproduced in meningeal hemorrhage, and convulsions and contractures may be observed in both affections.

The grave consequences of cerebral hemorrhage are in a measure indicated by the character of the initial symptoms, the seat and extent of the lesion, and the age and previous health of the patient. The lesion is probably very extensive, and the issue of the attack correspondingly grave in the fulminating cases, when there is sudden and complete resolution, abolition of reflex excitability of the pharynx, and considerable fall in bodily temperature. If this state be prolonged and convulsions and contractions be added to the symptoms, the extravasation has probably made its way into either the brain cavities, the cortex, or the mesocephalon—an event that almost invariably leads to a fatal determination. Hemorrhages of this class being more frequent in middle-aged and in old people, the prognosis at the outset is less favorable than it would be in the young. The existence of a bed-sore shortly after an attack is a sign of fatal significance; so are great depressions or rapid rises of the bodily temperature, and reactive inflammations, with headache and contractures of the paralyzed limbs. A sad result is likewise to be feared if the patient has previously had one or several attacks; and the ultimate prognosis is equally bad in all cases of physiological ruin or decay, as in senile degenerations, chronic kidney diseases, and the like.

If the patient do not die in the attack, and he should resist the subsequent phenomena of the disease, he is always subject to another attack, unless carried off by adynamic symptoms or an intercurrent malady, as encephalitis or pneumonia, and he is left with an incurable infirmity, and often with a weakened mind.

The prognosis, on the contrary, is usually pronounced as favorable if the attack has come on in a young person as the result of muscular or mental strain; nevertheless, hemorrhages occurring in infants and children often leave them in an idiotic condition. It is also held to be a favorable augury when there is no loss of consciousness and but little paralysis. Even in the mildest cases it is doubtful whether a patient ever completely recovers. Such an event is probably rare, and the question is open to much discussion.

There are no absolute rules for the treatment of this affection, and the symptoms are usually uninfluenced for good, even after the most energetic and well-considered efforts.

In attempting to avert a threatened attack, it must not be expected that a prophylactic influence can be exerted in such conditions, as the presence of miliary aneurism or granular disease of the kidneys with cardiac hypertrophy; but many of the exciting causes, which are identical with those found in cerebral hyperæmia, may be removed or prevented by proper measures. When the state known as agoraphobia is thought to be a predisposing cause of cerebral hemorrhage, therapeutic measures should be taken accordingly.

During the occurrence of the hemorrhage, the tendency of physicians in times past was to do too much. The attack is best treated by judicious inaction, such as perfect quiet in a cool room; elevated position of the head, the removal of a tight collar or any other cause of passive congestion; cold to the head, dry cups to the surface, and the employment of such derivative agents as diminish the cerebral hyperæmia. Although the former advocates of venesection have laid down rules for its employment in this affection, and claim with a certain degree of probability that intra-cranial pressure is diminished thereby, its employment should be resorted to with great caution, even in the cases that correspond to the indications for blood-letting, since in most cases it only hastens the final result by weakening the cardiac action.

The use of stimulating agents is advisable, to counteract the failure of the heart and of the respiration, resulting from incomplete hæmatosis and paralysis of the respiratory centre. Dashing cold water in the face; cutaneous irritation by various methods; ammonia to the nostrils or administered internally; the administration of coffee, wine, and musk—which may be given by enema if the patient cannot swallow—are each useful in arousing the depressed action of the respiratory action of the cardiac aud respiratory centres. Cold is effectual in checking the convulsions. A laxative enema may be administered if the bowels are constipated, and if necessary, the catheter should be used.

After the attack is over, the less that is done to allay excitement during the inflammatory reactive stage that follows the better. Enforcement of intelligent hygienic rules and the occasional administration of a sedative are about all that we are justified in doing.

The symptoms of irritation having passed, the object of treatment is to promote the absorption of the extravasated blood and to improve the condition of the paralyzed nerves and muscles. Galvanism is the most useful agent we know of to bring about this object. It should be applied to the brain, to the cervical sympathetic, and to the muscles, in conjunction with massage and hydro-therapeutics. It does not appear that much benefit has resulted from the faradic current.

The cures reported to have taken place after the application of strong magnets and other metallic appliances, are probable instances in which the lesion was mainly situated on the optic thalamus. Hemiplegia following a lesion of this organ, being more or less transitory, it is impossible, in the absence of a convincing number of clinical cases, to separate the specific influence of the magnet from what may be mere coincidence or the result of strong mental suggestion. It would, therefore, be premature to formulate an opinion as to the merits of a plan of treatment as recent and imperfect as that employed in the metallo-therapeutic method. Nevertheless, from the great number of interesting facts in connection with the subject, it merits further inquiry.

THE VATICAN HOSPITAL.—A correspondent of the *Allgemeine Wiener Medizinische Zeitung* describes the new hospital, built by the Pope, for use in time of epidemics. It has 200 beds, and is provided with every improvement which modern experience has been able to suggest. Over the main entrance is the inscription: Munificentia Leo. XIII. Upon admission to the hospital, the patients suffering from cholera or other epidemic disease, are first taken into a large reception room, where their clothes are removed and thrown into a disinfecting trough. They are then carried to the upper floors by a hydraulic elevator. In each room is a metal tube through which either warm water or steam is conducted, and for every floor is a large, light and airy bath-room. For patients in the algid state of cholera there is an apparatus made of glass in which they may receive a vapor bath. The rooms are light and well ventilated.

A MODIFICATION OF THE PROCEDURE OF WIRING BONES,

WITH A DESCRIPTION OF NEW INSTRUMENTS DEVISED FOR THAT PURPOSE.

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To overcome the difficulties in the wiring of bones, I devised the instruments and have for several months practised the procedure described in this paper.

The DRILL, which is shown in Fig. 1, *a* and *b*, is made of one solid piece of steel. Its handle is octagonal, one-fourth of an inch in diameter and four inches long to the shoulder, which tapers quite abruptly to the shank.

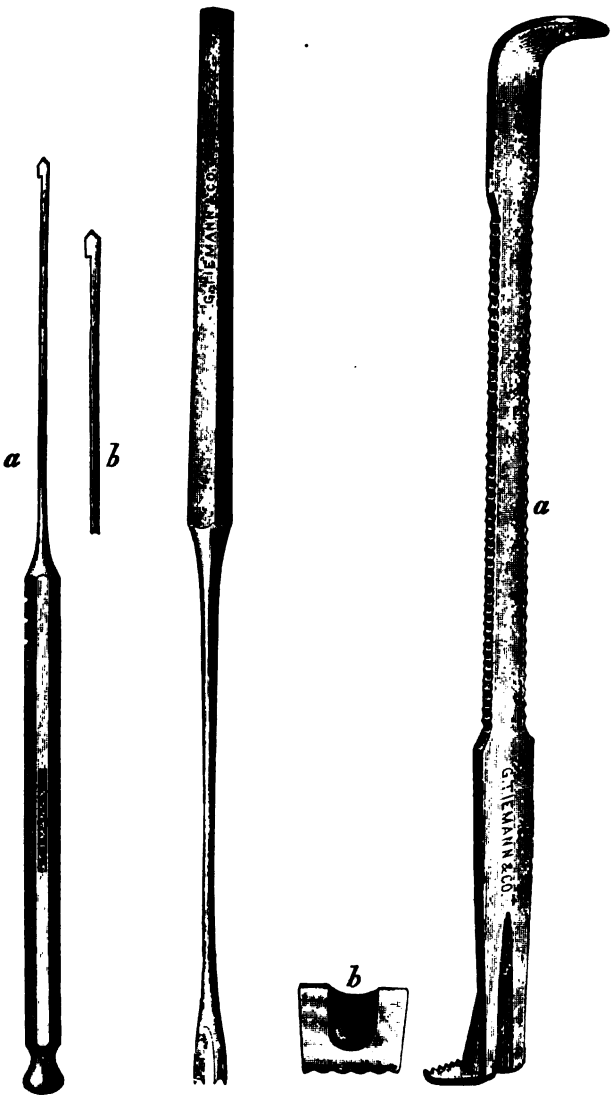

FIG. 1. FIG. 2. FIG. 3.

FIG. 1.—*a*, Crochet Drill, two-thirds actual size; *b*, end of drill, actual size. FIG. 2.—Fork, two-thirds actual size. FIG. 3.—*a*, Grooved Retractor, two-thirds actual size; *b*, front view of end of retractor, actual size.

The shank is one-sixteenth of an inch in diameter, two and three-quarters to four inches long, of fine spring temper, and terminates in a flattened head which is a little wider than the diameter of the shank. The peculiar feature of this drill is a shallow notch cut into one side of the head and forming the end into a hook. It is important that the notch shall not be made too far from the point, that it shall not be too deep, that the side of the head beyond it shall have exactly the shape shown in the figure, and that whatever the other dimensions of the drill it shall always be constructed just as described. Three transverse grooves upon the handle, near the shoulder, are an index to mark its position with reference to the circumference of the instrument.

The FORK is shown in Fig. 2. It is also made of one solid piece of steel and is finally annealed. Its flattened handle, four inches long, is continuous with the shank, also four inches long, which gradually tapers to a diameter of one-eighth of an inch, and which terminates in a double fork. The prongs of the primary fork are three-eighths of an inch long, and at their ends are notched one-eighth of an inch deep, forming secondary forks.

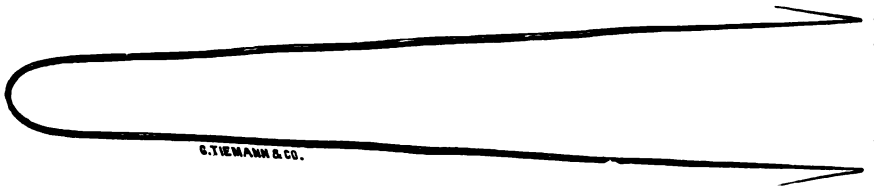

FIG. 4.—Wire Suture, two-thirds actual size.

The GROOVED RETRACTOR is made of German silver or other metal, and is shown in Fig. 3, *a* and *b*.

The WIRE is of pure silver, annealed. It is used of different thickness, and, if practicable, it should be large enough to nearly fill the drill hole. A large-sized wire is not apt to cut through the bones, and forms a strong bond of union between them. The ends of each length of wire are tapered for about two inches and bent at an acute angle as shown in Fig. 4.

The procedure is as follows: The bones to be wired are sufficiently bared, but need not be completely denuded. The withdrawal of the soft parts for drilling through the smallest possible incision is effected by means of the grooved retractor, which not only retracts but at the same time depresses the obstructing tissues. The drill is passed along the channel of the retractor directly to the bone, cutting its way through any overlying soft tissues by an incomplete rotary motion. When the bone is reached the drill should never be withdrawn in any degree for fear of fouling, but should be urged onward by a rotary motion with continuous and light pressure. The drill being made in one piece, and larger at its head than in the shank, its progress, like that of a probe, can be nicely felt as it passes through the bone, which would not be the case were the mechanism for drilling a complicated one or were the drill driven at high speed. In drilling transversely through a bone, as in the case of the upper end of the tibia, the passage of the head of the drill through the proximal portion of compact bone, through the cancellous structure, the striking of the distal portion of compact bone and its passage through it can all be clearly discriminated.

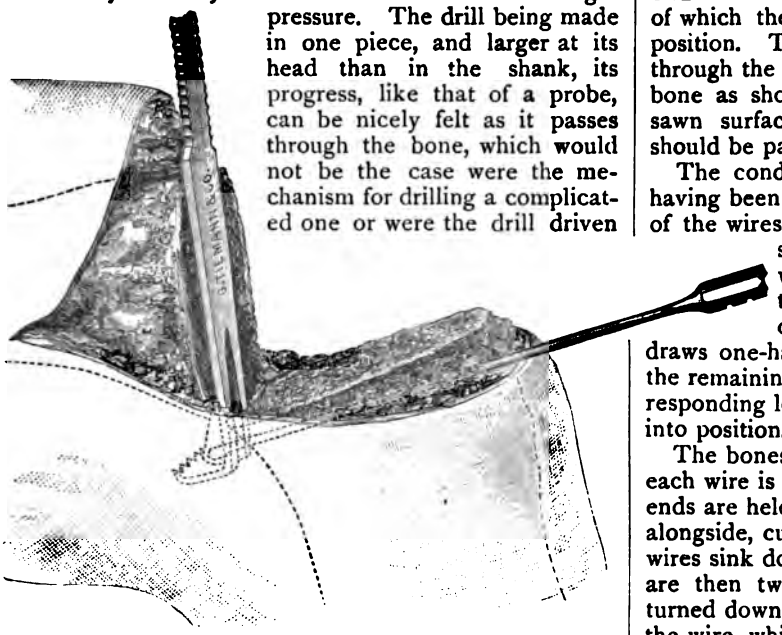

FIG. 5.—The grooved retractor in use, to expose the notch of the drill in wiring after an excision of the knee-joint.

The emergence of the point of the drill having been detected by the finger watching at the presumed place of exit, or being known by the change in resistance, the next step is to pass a loop of silk through the bone to serve as a conductor for the wire suture. The silk should be of a thickness barely large enough to fill the notch in the drill. When the end of the drill is far below the surface, the fork is needed to deposit the thread in place. When the soft parts crowd upon the buried end of the drill, they should be pressed back by using the retractor, as shown in Fig. 5; then the end of the drill is received into the groove of the retractor, and is easily accessible to the fork carrying the loop of thread. When the silk has been lodged in the notch, it is held there by gentle counter-traction, while the drill is cautiously withdrawn without rotation, leaving the thread in its place. When the end of the drill is far below the surface the counter-traction may be exerted through the medium of the fork. By a dexterous movement the loop may be shifted from the secondary forks (Fig. 6, *a*) into the crotch of the primary fork (Fig. 6, *b*) around which it plays as a pulley as it is drawn through the bone. It is essential that the

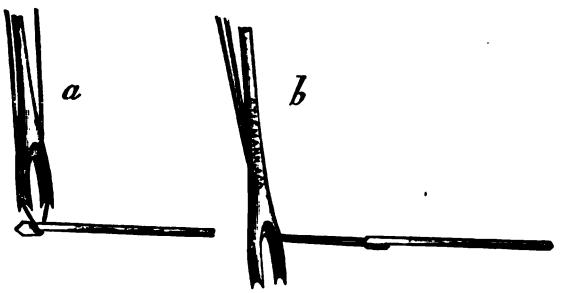

FIG. 6.

closed ends of the loops should lie between the bones to be wired. If, therefore, a loop needs reversing, a second thread is passed through the existing loop, by means of which the new loop is pulled through the bone into position. The free ends of the thread are then passed through the loop and drawn tightly across the face of the bone as shown in Fig. 7, thus lining off the broken or sawn surface, and indicating clearly where the drill should be passed through the opposing bone.

The conducting loops, or guides, for the wire sutures having been lodged in place, the next step is the drawing of the wires into position. The bent end of the wire suture is hooked in the end of a loop of thread which has been freed, and under a little counter-traction is fed to the opening, while the operator pulls upon the conducting loop and draws one-half the wire through the bone. The end of the remaining half of the wire is then caught into a corresponding loop through the opposing bone, and is drawn into position.

The bones having been brought into close apposition, each wire is embedded before being twisted. While the ends are held in their future position the scalpel is drawn alongside, cutting the subjacent soft parts and letting the wires sink down to the bone. The tightly drawn ends are then twisted and cut short to the twist, which is turned down. The slits in the soft parts are closed over the wire, which is to remain permanently, by a fine catgut suture.

By proceeding in the manner I have detailed, the wiring together of bones is a precise, easy, and expeditious operation. It can be done without extruding the ends of the bones through the soft parts, it being only necessary to cast the guiding loop of thread over the end of the drill, no matter how deeply the latter may be situated. It is easy to carry the wire transversely through the whole extent of bone, thus securing an effective hold upon it. A suture only dipping into the cancellous structure, as is the case in the usual mode of wiring after an exsection of the knee-joint, may be regarded as a slack wire. It

generally cuts partly through the soft bone tissue before the surgeon can apply retentive apparatus to the limb. On the contrary, when the sutures have been passed completely through the bones in the manner just described, they alone hold the bones firmly in apposition, and the grating formed by the wires prevents the intru-

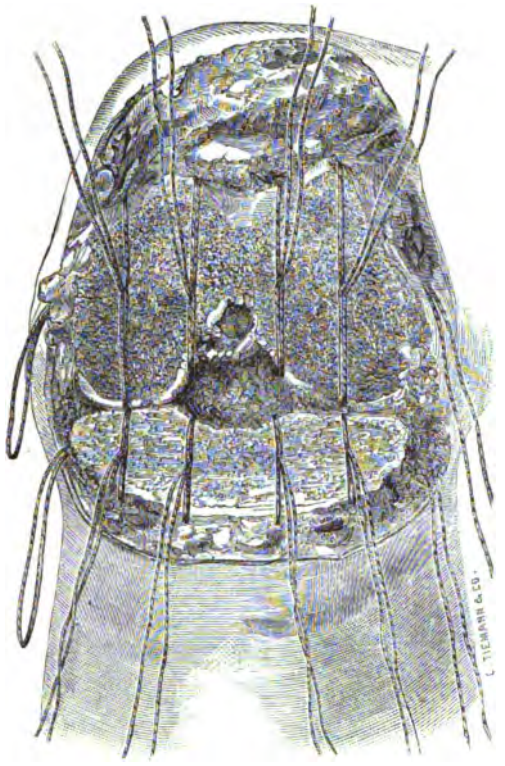

FIG. 7.—The loops of thread in position preparatory to inserting the wire sutures, after an excision of the knee-joint.

sion of the soft parts. In an exsection of the knee-joint, in addition to four wires passed antero-posteriorly, I also bind the bones together by a wire passed transversely, which acts as a substitute for the lateral ligaments. In simple fractures of the patella, exsections of the knee-joint, and compound fractures, I have passed the drill more than thirty times, besides being present when others have operated in the same manner, and I have never seen a failure or miscarriage in the execution of any step of the procedure.

WHAT SOME GREAT MEN THOUGHT OF THE CORSET.—Napoleon Bonaparte said to Dr. Corvisart, speaking of the corset, "This wear, born of coquetry and bad taste, which murders women and ill-treats their offspring, tells of frivolous tastes, and warns me of an approaching decadence." Joseph II. of Austria was very severe upon the corset, and made a law confining its use to abandoned women. The last King of France embodied his opinion of this abomination in this stinging epigram: "Once you met Dianas, Venuses, or Niobes; nowadays, only wasps." The great naturalist Cuvier was walking one day with a young lady, who was a victim of tight-lacing, in a public garden in Paris. A lovely blossom upon an elegant plant drew from her an expression of admiration. Looking at her pale thin face, Cuvier said, "You were like this flower once; to-morrow it will be as you are now." Next day he led her to the same spot and the beautiful flower was dying. She asked the cause. "This plant," replied Cuvier, "is an image of yourself. I will show you what is the matter with it." He pointed to a cord bound tightly round the stem, and said, "You are fading away exactly in the same manner under the compression of your corset, and you are losing by degrees all your youthful charms, just because you have not the courage to resist this dangerous fashion."

INTRACRANIAL CEPHALHÆMATOMA.[1]

BY E. S. McKEE, M.D.,

CINCINNATI, O.

A PHYSICIAN'S library will, in many instances, give him no information concerning cephalhæmatoma. A large list of text-books may be searched to no avail for a mention of "intracranial cephalhæmatoma." Has the searcher after medical knowledge a well-ordered and extensive public library at hand, well supplied with bound journals, diligent search may be rewarded by a few hidden points. The word "cephalhæmatoma" comes to us from the Greek. It is an effusion of blood occurring in newly born infants, forming a tumor of the head.

The intracranial variety, the subject of this paper, is divided into (*a*) those situated between the skull and dura mater; (*b*) those occurring in the arachnoid cavity.

As causes of intracranial cephalhæmatoma may be enumerated most of the causes of the external variety, as, for instance, the reception of some injury to the child during parturition.

One can, however, find many instances where the external variety occurred, the labor being light. They are mentioned in breech cases, and, in Vienna, have been noticed on those delivered by Cæsarean section. It is quite possible that through the crushing of the parts of the head together during delivery, there occurs tearing of the periosteum and bone blood-vessels. This pressure being released, the parts are again suddenly freed. Emptied by the diapedesis, caused by the crushing which they had undergone, hyperæmia and engorgement are the results of the removal of this pressure. Thus, from nature's horror of a vacuum, we have a sudden rushing of blood. The sources of the hemorrhage are probably the tender blood-vessels. These enter the bone from the dura mater, and are immediately after the release of the pressure overfilled and ruptured. Possibly it might be due to a varicose condition of the vessels. The hemorrhagic diathesis might be a cause. The tendency in some instances is probably inherited. In cases of fracture of the bone, cephalhæmatoma on the dura mater may be due only to the hemorrhage from vessels wounded by the broken edges of bone. Feist and others decline to recognize as cephalhæmatoma those instances where effusions of blood occur after fracture. The fact should be borne in mind that cephalhæmatoma, both external and internal, occurs without the coexistence of fissure of the cranial bones. Admitting that the extravasation of blood results from its escape out of the blood-vessels which are wounded by a fissure of the bone, the centre of each tumor must correspond with the fissure. This has, however, not been found to be the fact in the cases reported. The fissure and effusion may occur at the same time and from the same cause, but the latter must not be considered a result of the former. M. Valleix, in his "Clinique des Enfants Nouveau-nés," has an engraving which illustrates beautifully the ease with which the blood may be caused to transude through the imperfectly ossified skull of the child. The direction of the pressure during labor and the greater porousness of the outer than the inner surface of the skull, accounts for the excess of the extra over the intracranial variety. The usual causation of the former—pressure—is quite adequate, if unusually forcible, to cause the latter.

The diagnosis of intracranial cephalhæmatoma depends wholly, of course, on the symptoms of brain pressure which it is liable to occasion. These are twitchings, convulsions, stupor, or paralysis. The external variety is, of course, much more easily diagnosed.

While the prognosis for the extracranial variety is good, that for the intracranial is bad. Death occurs most frequently from brain-pressure, or from necrosis or caries of bone leading to perforation, thrombosis of the cerebral sinus, extension of the inflammation to the meninges and

[1] Read before the Mississippi Valley Medical Society, September 9, 1885.

brain itself, and pyæmia. Iodicy is one of the results of internal cephalhæmatoma. Dr. West is the only observer who watched the cure of internal cephalhæmatoma. This was very analogous to the repair of the external. The effusion became encircled by an osseous ring. In one of the two cases noticed by Dr. West, convulsions came on in fifteen hours and terminated in death in forty-one hours. A large quantity of blood was found post-mortem beneath each parietal bone. The effusion of blood upon the surfaces of the brain does not immediately and universally cause cerebral symptoms. This is probably due to the yielding structure of the infantile skull with its membranous joints and unossified sutures. In one of Dr. West's cases all went to prove that the effusion beneath the dura mater must have existed many days before there were any cerebral symptoms. From all the literature I am able to obtain, mention is made only of the following cases, which are briefly recapitulated.

West [1] reports as follows: E. W——, aged sixteen days; the fourth child, all easy labors. The birth took place without noteworthy occurrence. Took the breast well. On the third day a small swelling about the size of a walnut was noticed a little to the right of the vertex, extending downward and forward over the parietal bone. The tumor increased in size every day, but the child's health remained undisturbed, except that it was restless at night. It was well nourished, well formed, and perfectly healthy in its appearance. Pupils responded readily to light.

Neither the fontanelles nor the sutures were remarkable for tardy or precocious ossification. A soft, elastic, non-pulsating, semifluctuating tumor, of irregular, oval outline, occupied nearly the whole of the right parietal bone. The greater prominence of this tumor was just over the parietal protuberance, a little above which was a light depression or furrow, and again a second prominence, the base of which reached almost to the sagittal suture. The tumor was thus divided into two, that nearer the vertex being the softer and more manifestly fluctuating than the other. Both tumors were twelve inches in circumference. They did not anywhere extend beyond the sutures bounding the parietal bone. The ossified ring was absent. The child seemed uneasy while its head was being examined, but did not cry, and pressure on the tumor had no effect on the nervous system. On the fourth day the child appeared well, and the tumor had ceased to enlarge. Three days later there was no obvious diminution of the tumors, but that over the parietal protuberance was rather firmer. On the evening of this same day the child became very drowsy, had convulsive twitchings of the muscles of the face, and the skin of the surface assumed a yellowish hue. The child sucked heartily, but vomited in a short time, and passed an unquiet night. On the afternoon of the next day she yawned deeply two or three times, and then had an attack of general convulsions which lasted about three minutes. During the night she continued very ill, convulsed at four o'clock in the morning, and died in convulsions at 6 A.M., the ninth day after the doctor first saw her, and the twenty-fifth day of her life.

Post-mortem, thirty-three hours after death, with permission to examine only the head. The usual appearances were found external to the pericranium. These do not bear directly on this paper, and are omitted. A fissure was then noticed in the right parietal bone, running from the coronal suture, about an inch from the anterior fontanelle, obliquely backward and upward. The edges of this fissure at the time of making the examination were quite clean, not stained with blood as they afterward appeared. On the inner surface of the bone was an effusion of blood, between the cranium and the dura mater, more than half an inch in thickness, and occupying the whole of the fossa of the parietal bone. The tumor was oval-shaped and slightly irregular. Between the two layers of the dura mater, by which it was covered, were numerous bony deposits, and a ring of newly formed bone surrounded its base. This ring had not attained the same development in its whole circumference. Osseous matter had been abundantly poured out along the frontal margin of the tumor, more sparingly elsewhere, and being entirely absent along its inner border. It appeared to have been formed partly by ossification of the dura mater, partly by heaping up of new bone on the skull. To avoid the destruction of the specimen, the clot was raised on one side only, but on that the bone was found perfectly smooth and unaltered. The blood seemed to have been poured out in successive layers, none of which were of very recent date, since all were firmly coagulated. The red particles had not subsided, but remained equally diffuse throughout the clot. The rest of the dura mater and interior of the skull presented no unnatural appearance. There was a depression of the right hemisphere of the brain, in a situation corresponding to the tumor; with this exception the convolutions of the brain presented a perfectly natural appearance, and there was no fluid beneath the arachnoid, nor any injection of its vessels. The whole right hemisphere was pale, bloodless, and very soft. The left was of natural consistence, but its section presented an unusually large number of bloody points. There was no fluid in the ventricles, but little blood in the sinuses, and no appearance of importance was observable in the brain. No evidence or history of external violence could be obtained. After summing up the case, the doctor thought the fissure had occurred during labor, and was probably produced by the uterine action driving the head forcibly against the promontory of the sacrum.

While on duty in the out-patient obstetrical department at St. Bartholomew's Hospital, under Dr. Mathews Duncan, the writer [1] was called to attend Mrs. E. W——, 80 Farringdon Road Buildings, London. A breech presentation was diagnosed, and a healthy female child was born, the labor being quite easy. The mother was aged forty-seven, married twenty-seven years, and had given birth to thirteen children, six of whom had died, and two were still-born. Saw the child the next day, it was doing quite well, and seemed to be a very promising child. On the morning of the third day the child appeared fretful. Nurse said it had not passed its water yet, but it passed it that instant in my presence. Called on the evening of the fourth day, and found the child dead in bed beside its mother, still warm, the mother not yet aware of its death. She gave the following history: Child began having convulsions at 5 P.M., on the third day; had two per hour all night until noon of the fourth day, when it began having three per hour, and died as stated, having cried five minutes before my arrival. She said that three of her other children had died of convulsions, and she gave this one up to die as soon as they came on. She thought the doctor could do it no good, and did not bother him.

Autopsy, twenty hours after death, made in company with Mr. H. C. Cronk, midwifery assistant to the hospital. Body well nourished and fat. Head presented nothing unusual externally. An excision through the scalp, from mastoid to mastoid, found the skin normal; but between the scalp and pericranium a large effusion of blood was found, coagulated, extending over a great part of the left parietal bone, and not surrounded by any indurated ridge. On opening the skull, the bones were found in a perfectly normal condition, the dura mater healthy, but in the cavity of the arachnoid, and corresponding in position to the outer tumor, a large clot of blood was found, causing a depression of the brain, one-half to three-quarters inch in its deepest part, which was one inch to the left of the posterior fontanelle. The effusion was larger than that externally, reaching down to the foramen magnum. No ruptured vessels could be discovered. Other parts normal. All investigation of the

[1] Med. and Chir. Tr., xxviii., 397. London, 1845.

[1] Transactions Cincinnati Academy of Medicine. Cincinnati Lancet and Clinic, October 13th, 1883.

most careful kind failed to get any history of a blow, fall, or injury, either before, during, or after delivery. After thoroughly sifting the matter, the death certificate was signed intracranial cephalhæmatoma.

Dr. J. L. Cleveland [1] showed the following specimen to the Cincinnati Academy of Medicine. A well-nourished child, still-born, died probably five days before birth, and weighed eleven pounds. Discovered an external tumor before delivery, but mistook it for the bag of waters. There was no unusual amount of pressure during labor. The mother had previously borne two healthy children. No miscarriages. Autopsy performed in the presence of the Academy. Discovered an internal tumor and depression of the brain.

Dr. Jackson [2] reported a case which had been examined post-mortem. Tumor on the inside of the occipital bone with ossification of the pericranium. No thinning of the bone and no disease externally.

Ruge [3] demonstrated to the Gesellschaft für Gynekologie in Berlin a skull with internal cephalhæmatoma. The child was born without artificial help, and died soon after delivery, somnolent.

Ruge [4] showed another skull with cephalhæmatoma, both external and internal. In this case, on account of a straight, narrow pelvis, it was necessary to use the forceps. The child died after eight days. There was no fissure of the cranial bones.

West [5] mentions a case where hemorrhage into the cavity of the arachnoid was associated with internal tumor.

Betscher [6]: Dr. West mentions this case as one of internal cephalhæmatoma, but could not give the particulars, and I was unable to find them myself.

Von Siebold [7]: Forceps delivery, but the child's head was uninjured. Both external and internal cephalhæmatoma existed. The child died with symptoms of exhaustion on the fifth day.

Held [8]: Labor natural, except that the funis prolapsed. Child still-born, with subaponeurotic and intracranial cephalhæmatoma. Bone uninjured.

Dubois [9] relates a case which had occurred to M. Moreau. The skull received no injury, and there was no external cephalhæmatoma. The tumor was situated on the inner surface of the os frontis. Death was preceded by head symptoms.

Padieu [10]: Child still-born. Fracture of the parietal bone, two inches long. External and internal cephalhæmatomæ, which communicated readily with each other through the fissure.

Haere [11]: Quick labor, fracture of the right parietal bone. Internal and very slight external cephalhæmatoma. Head symptoms from birth. Death on the fourth day.

Bouchard [12]: Case V. is one of fissure of the parietal bone in a premature fœtus. External and internal cephalhæmatoma. Death from marasmus on the twenty-first day.

Bouchard [13]: An oblong aperture in the base. External and internal cephalhæmatoma. Death in coma on the ninth day.

Hennig [14] reports finding four cases of intracranial cephalhæmatoma, but gives no particulars. He also refers to a case of Olshausen's, where there was fracture of the skull caused by precipitate labor.

These twenty cases are all that it is possible to find mention of in the literature, and, I think, are about all that have been observed.

[1] Tr. Cincinnati Academy of Medicine. Cincinnati Lancet and Clinic, 1881.
[2] Am. Journal of the Medical Sciences, 1855, N. S., xxix., p. 67.
[3] Berliner klinischer Wochenschrift, June 15, 1875.
[4] Loc. cit.
[5] Tr. Royal Med. and Chir. Soc., London, June, 1845.
[6] Annalen, Bd. III., S. 50.
[7] Von Siebold's Journal, Bd. IX., S. 43.
[8] Hecker's Annalen, 1831, Bd. XX., S. 34.
[9] Nouveau Dictionnaire de Médecine, tom. vii., article Cephalhæmatoma.
[10] Valleix: Clinique des Enfants Nouveau-nés, p. 541.
[11] Von Siebold's Journal, Bd. V., S. 257. Vratislaviæ, 1837.
[12] De Tumore Cranii Recens Natorum.
[13] Loc. cit.
[14] Gerhardt's Handbuchder Kinder krankheiten, Bd. II., S. 55. Tübingen, 1877.

Treatment can be disposed of in a few words. The literature does not show a case that has been treated for intracranial cephalhæmatoma. The diagnosis has always been made on the post-mortem table. Possibly that horrid instrument the trephine might find here a field for usefulness.

57 West Seventh Street.

REMARKS ON ABDOMINAL SURGERY, WITH CASES.[1]

By EDWARD BORCK, M.D.,

ST. LOUIS, MO.

At the meeting of the Tri-State Medical Society, held at Evansville, in 1879, I read a paper entitled "Ovarian Tumors: At what Stage of the Disease is it the Proper Time to Operate?" At that time my own experience was very limited, and I had to sustain my views, in favor of early operations, on theoretical grounds, making quotations from and using some statistics of others. However, my paper was followed by a very interesting and instructive discussion. One surgeon remarked that my paper was a good one, containing valuable points and suggestions, but he could not agree with me as to an early operation—he believed in the waiting plan: let the patient live as long as she possibly can, and resort to extirpation only as a last chance. He had lost at least twelve patients in succession.

Another surgeon held the same view, but acknowledged, and to his credit may it be said, that he had lost thirteen patients in succession, and was almost afraid to touch another case; there were others, also, of the same opinion. There was but one surgeon who stated that he always operated as early as he had made a diagnosis, if his patient would let him; he saved about sixty-six per cent. of his cases.

My paper was published in the *Cincinnati Obstetrical Gazette*, March, 1880, but the report of the discussion was omitted.

I still adhere to the views then expressed, in favor of an early operation, and to-day I am able to sustain my former theory by my own practice.

In March, 1878, I had my first case of ovariotomy. The patient was a lady fifty-five years of age, suffering from a multilocular tumor. She lived in the country, and was recommended to me by my neighbor and friend, Dr. G. W. Hall, and I shall be ever thankful to him for his kindness; for if he had not sent me this case, I might never have had the others. Previous to this time I knew nothing about the operation, and very little of the disease, having had but little opportunity to observe such cases, and never having seen the operation performed. My surgical practice ran in another direction. However, I studied the operation as well as I had time to do while the patient was under observation, and made all the necessary preparations. I tried to find a work on ovarian tumors, by either Peaslee, Atlee, or Wells, but none of my acquaintances in St. Louis had either one of them in his library. Dr. Hall advised me to operate under the guidance and with the assistance of one who had had experience in such cases, which wise suggestion I followed, and called upon Dr. Louis Bauer, who cheerfully agreed to aid me with his counsel. Under his protection I operated upon this patient, notwithstanding that all the other surgeons who were consulted advised against the operation, and in favor of the expectant plan. The cyst was only of a few months' duration, in the third stage. I conducted the after-treatment myself; my patient recovered.

Here allow me to relate some of the tribulations I had to endure during the progress of my case; and I will first state that, at that time, the opinion of the profession of my city was almost unanimously for the waiting—the last moment—plan.

[1] Read before the Mississippi Valley Medical Society, at its meeting in Evansville, Ind., September, 1885.

The surgeons in St. Louis prior to 1878 had not been very successful with ovariotomy. The bad results were attributed to the atmosphere—they said that malaria in our climate acted so very detrimentally upon these cases. It was taken for granted that every patient operated upon would die, and every doctor, even those connected with the case, expected that mine would also succumb, and that is the reason why every doctor whom I met would put the polite questions: Is your patient dead? Will she die? How long do you think she will live? Questions framed in that style were the interrogations of all, except of Dr. Alleyne, who in his kind and big heart said, "I hope she will recover;" well, she did, and it was a wonder. Being called an enthusiast, it was said that the success would drive me crazy.

My next case was a lady forty-three years old. I removed a large right ovarian cyst in the last stage, and also removed the uterus; she died. Seventeen years before Dr. Pope had extirpated a cyst of the left side from this patient.

The next case was a young girl, fourteen years old, who suffered from a single cyst of the left side in the last stage; she died.

But we learn something from the cases we lose, and, you may rest assured, I devoted all my spare time to the study of such cases.

I then had eight successful cases in succession. The next case, one of ovarian cyst complicated with cancer, I lost.

The twelve succeeding cases recovered. Then I lost two cases, both of simple cyst in the last stage of the disease.

Out of my following twenty-five cases I lost but one, a colored woman; I diagnosed a cyst of broad ligament, last stage, and recommended tapping; however, it was agreed to operate, and she died.

This gives me fifty cases from March, 1878, to May, 1884, with five deaths, as follows: Simple cysts, 8; cyst of broad ligament, 2; ovarian cyst with cancer, 1; ovarian cyst with removal of uterus, 1; persistent pain of ovary, found on removal to be due to cystic degeneration, 1; fibro-cystic tumors, 6; oligo- and poly-cysts, etc., 31.

These cases were all from private practice, as I am not directly connected with any hospital, nor have or had charge of any hospital where such cases present themselves or could be sent to; they were all, with the exception of one case, operated upon at their own homes, and were distributed over several States. The cases were all, with exceptions of those that died, early operations—from six to twenty-four months' duration; the youngest patient was fourteen years, the oldest sixty years. Twice I used drainage-tubes through the abdomen, and once drainage through the vagina, in cases in which there were many adhesions and consequent surface bleeding. In all the other cases the abdomen was closed; the pedicle was dropped into the abdomen in every case. In one case, a simple cyst, I had to open the abdomen again on the third day, as my patient was sinking from internal hemorrhage; I washed out the clotted blood and closed the wound again. She recovered. In this case I had been induced to employ the catgut ligature. I will never use it again.

After my first case I adopted one mode of operating, which, with the exception of lately discarding the spray, I have strictly adhered to in every instance, and with which you are all acquainted.

I remain with my patients until they are out of danger—sometimes from three to six days.

What influence the atmosphere and the malaria of Missouri and vicinity have had upon such patients I am not able to say at present, for other surgeons of my city and elsewhere have also had brilliant success of late. It may be that the air, so detrimental previous to 1878, has since changed for the better.

Now, when we know that the average life of a patient afflicted with ovarian tumor is four years; that polycysts terminate fatally in twelve months, oligocysts in twenty-four months, after the third stage has begun—what conclusions can be drawn from my own cases?

1. That those cases operated upon in the very last stage died.

2. That the comparatively early operations were successful.

3. That there is no absolute need to send your patient off to a hospital or private institution if she is moderately comfortable at home. I always advise those gentlemen who attend my lectures, as well as others, to do as I do—take care of their own patients, if they have the confidence in themselves to do so; but if you do, by all means give your patient all your time and attention, and be well prepared for all emergencies.

For one class of patients the hospital may be indicated; for another class of patients a private institution may be preferable, or more convenient for the surgeon; nay, it may become a necessity for him who has more than one case—it saves time and labor; for I know what it is to travel fifty, one hundred, or five hundred miles to see your patient, and prepare for an operation, and give her your exclusive time. It has been intimated to me more than once that I must pick my patients. I will freely and openly admit that I do, and I will tell you how I do it. If a case of fibrous tumor of the uterus presents itself, and the patient is fairly comfortable, age about forty-three or forty-five, I advise her to wait and not interfere by operation—such are cases for the waiting plan; for we know that if she passes her menstrual period she has a chance to recover; at least her misery will cease, and if the tumor does not shrink, it will at least cease growing. If she still insists upon the operation, I refuse, and advise her to obtain the opinion of some one else. I know that some of such refused patients have been operated upon by others, and they have died. If others present themselves with tumors in the last stage, with broken-down constitutions, and with the chances all against them, I give them no encouragement whatsoever, and they will of their own accord seek other advice.

The favorable cases, of course, I encourage; but I never urge the operation. I leave that to the patient to do. Again, I see a patient where a certain something (call it, if you will, the faculty of presaging) tells me that the result will, or may be, fatal; then I had rather not have the patient. I must feel that my patient will survive, and so must she—there must be the utmost confidence on both sides.

I am never anxious for a case; I am never anxious to operate for the sake of the operation. On the other hand, I would not refuse a case, even the most desperate one, if the operation offered the only, even the slightest, chance of saving her life. Here moral duty would commend the surgeon to run any amount of risk.

I will relate a case which I saw in Illinois some time ago, one of ovarian cyst in the last stage, complicated with extra-uterine pregnancy. The woman suffered dreadfully, she was a pitiful object to look at, and certainly doomed to death. Had I been prepared I would have operated at once, as she was willing; the next day was Sunday, and she would not be operated upon on that day. It was put off until Monday morning; but the patient did not live until then. Sunday the tumor broke through the vagina, and she died at once. In such a case I think it would have been perfectly justifiable, at least to try and give relief.

My intention was to relate all my cases in detail, but I think now that such is not necessary; for, even after one has gone through the labor of preparing a long list of cases and their histories, very few will read them, far less study them. We are well enough supplied with the reports of isolated successful cases. You can hardly take up a journal, wherever published, that does not contain the report of a case. They are of no value in a statistical sense, but it speaks well for the American pro-

fession that there are men, even in the smallest towns, capable of performing any operation, and ready to do their duty. In the near future this will be considered a minor operation. But is it not reasonable to suppose that wherever there are successful cases there may also have been failures? How few of those isolated fatal cases do we see reported!

I have seen many operations abroad and at home. Of the home cases in which I have seen others operate the majority died. Not a single one of these cases has been reported up to the present time. Well, my friends may say I picked my cases; I would call it a judicious selection or discrimination between cases, and recommend all who begin to do the same. One thing my friends cannot say: that I hide my fatal cases. Every one of my fatal cases has been published at once and in detail, and I will publish every other case I happen to lose in the future, for the benefit of all. I keep full records of all my cases, and some day, when their number has doubled, I may have them published.

Since 1878 I have seen and examined on an average about twenty-five cases per year for abdominal enlargement, and in not a single instance have I made an exploratory incision for the purpose of making a diagnosis, though it is justifiable in very doubtful cases, and, as a rule, safe.

I do not believe in the practice of opening every woman's abdomen because it is easier to make a diagnosis. I prefer the more difficult manner—without the knife; but whenever I might be in doubt, and should have to resort to an exploratory incision, it would be with the distinct understanding to go on with the operation at once if such were indicated.

Clinical Department.

A HUGE DOSE OF PEPSINE.

Dr. W. H. Rassman, of 219 East Forty-eighth Street, relates a case of poisoning by pepsine. The patient was a man suffering from dyspepsia, for whom he had prescribed five drachms of pepsine to be made into twenty powders, one to be taken after each meal and to be followed by a dose of hydrochloric acid. The patient was of a practical turn of mind, and, having read somewhere that pepsine was inert, determined to test the matter himself. Accordingly he emptied the powders into one mass and swallowed the entire five drachms. This was done in the evening, shortly before retiring. In about an hour he was seized with an intense burning pain in the epigastrium, accompanied by nausea, and three hours later with violent colicky pains and diarrhœa. These symptoms continued until nearly noon of the following day, when they disappeared, leaving only a moderate amount of nausea, burning in the epigastrium, and a feeling of exhaustion. There was no vomiting. Dr. Rassman did not see his patient until after he had recovered, and nothing had been taken to counteract the effects of the drug. The pepsine had been procured from a reliable apothecary, and there was no reason to suspect that it was not pure and of full strength. The solution of hydrochloric acid was not touched.

THE HEALTHFUL EFFECTS OF ALCOHOL UPON THE LIVER.

Dr. C. C. Duffy, of 263 West Fifty-fourth Street, writes concerning the good effects upon the hepatic circulation of alcoholic stimulants. The value of alcohol, he says, is best seen in persons who have passed through what might be called the sthenic stage of malaria, and have entered into the asthenic period. "In this state the constitution is so broken down as not to furnish sufficient caloric to resist the effects of the vicissitudes of the weather upon the circulation, a derangement of which produces a congestion of the liver and causes an interruption of its functions. Persons in this stage of malaria are always anæmic, and suffer cold even when warmly clad and during the heats of summer. Quinine, iron, strychnine, and phosphorus are all good for such cases in minute doses, but they do not furnish the great desideratum, heat. By the use of alcoholic liquors we can create an artificial heat by stimulating the circulation. If this be accomplished we dispel those congestions which always follow a disturbance of the circulation, and the liver, now not overburdened with too much blood, performs its functions as in health. The alcohol, in these cases, is not to be prescribed in regular doses, but should be taken in such quantities and at such times as will suffice to produce the desired effect."

Progress of Medical Science.

On the Significance of Osseous Lesions in the Diagnosis and Treatment of Inherited Syphilis.—A paper on this subject by Dr. R. Lomer, of Berlin, appears in the *Zeitschrift für Geburtshülfe und Gynäkologie* (Band x., Heft 2). It refers to the disease of the bones described by Wegner. Dr. Lomer holds that the presence of these changes in a well-marked form is proof of syphilis; and applying this test, comes to the conclusion that the large majority of cases of premature labor are due to this disease. General practitioners, in Dr. Lomer's opinion, know very little about these bone lesions. They are to be demonstrated by exposing the femur and making a longitudinal section of it. In a healthy bone, the junction of cartilage and bone is a simple line, either straight or undulating, but sharp and well defined. In a syphilitic bone it is a broad layer, from which irregular processes project into the cartilage. The epiphysis is either quite loosened, or there are deep fissures in the bone below the line of ossification. In some cases these changes can be easily seen with the naked eye, but in others they may be so slight as to need microscopical examination of carefully prepared sections. Although this disease indicates syphilis, yet a normal condition of the bones is not proof of the absence of syphilis. Dr. Lomer puts before his readers the following generalizations, based on the examination of forty-three fœtuses which had died in utero. When the bone disease is well marked, the liver and spleen are abnormally large. It makes no difference in the degree of the changes present, whether the syphilis is derived from one or both parents, whether in the parent the disease is one year old or ten, whether secondary symptoms have persisted or not, whether the parent has been treated or not, or whether the child be large or small. Syphilitic fœtuses differ in appearance from non-syphilitic. The latter are brown and mummified, the former flesh-colored and more œdematous. In the non-syphilitic the mother can commonly assign a date for the infant's death, and the weight of the fœtus corresponds to the period indicated by her statement. This is not the case with the syphilitic; and in them the placenta is commonly unusually heavy in proportion to the weight of the fœtus.—*British Medical Journal.*

The Nature and Treatment of Sea-sickness.—At the last meeting of the Berlin Medical Society, in July, Dr. R. Neuhauss read an article on an old subject, which, however, he presented in a somewhat new light. He desired, he said, to correct the common error of associating sea-sickness and vomiting. The latter was, it was true, a prominent and nearly constant symptom, but it was nevertheless but one of a number of symptoms. These are very decided malaise, loss of appetite, dizziness, great prostration even to apathy, slowed heart-action, dull, boring, usually unilateral headache, obstinate constipation and lowered functional activity of the kid-

neys. In their relations to sea-sickness men may be divided into three categories: The first group comprises those who never suffer from the malady; these are, at the highest estimate, not more than three per cent. of all who sail the seas. Another group embraces those who suffer constantly and never lose their susceptibility; these are also about three per cent. of the total number. Finally, there are those who are ill for some days on commencing a voyage, but who later become accustomed to the motion of the vessel and recover from the affection caused thereby. Many of the symptoms are explained by the changing intracranial blood-pressure caused by the vessel's motion. When going down into the trough of the sea, hyperæmia of the brain is produced, and in rising upon the wave, anæmia occurs. It is well known that nausea and vomiting follow upon any sudden diminution in the amount of blood within the cranium. During a recent voyage, the author said, he had discovered that the secretion of the kidneys was markedly reduced in a storm, when the movements of the ship were violent and long-continued. A consideration of this fact, which he established by actual measurement, led Dr. Neuhauss to the supposition that the dull, boring headache and apathy experienced after a long continuance of sea-sickness, were really a mild form of uræmia. Much amelioration, and even complete cure, might be obtained by lying down "all in a heap," with the hips and knees flexed and the head bent forward on the chest. In this way the vessels are made more tortuous, and there is less of a tide in the cranial circulation in consequence. There is also less tossing about of the abdominal organs, upon which some of the symptoms, notably those caused by irritation of the vagus, depend. Chloral hydrate is a valuable drug in sea-sickness. It may be given in doses of fifteen grains, not at the commencement, but on the third or fourth day of the disease. Other drugs the author regarded as useless, and spirits he thought were positively harmful.—*Allgemeine Wiener Medizinische Zeitung*, August 4, 1885.

Supplementary Spleen.—Mr. S. H. Peevor reports in the Indiana *Medical Gazette* for July, 1885, a case of supplementary spleen which he discovered in making an autopsy upon a native woman, supposed to have been poisoned. The natural spleen was enlarged to twice the normal size, but was healthy in other respects. The additional spleen was almost spherical, about one inch in diameter, and about one inch distant from the hilum of the natural spleen, which it was connected with by two or three narrow, white, fibrous bands. It was attached to the omentum, and its structure appeared to be that of a normal spleen.

The Pathology of Wry-Neck.—Since subcutaneous myotomy did not always produce the desired result, Volkmann has been led to open the sheath of the muscle and divide it by an open section. He has performed this operation a number of times in late years, and has thus had many opportunities of examining the muscle microscopically. In several cases this was perfectly normal, but in others the muscle was entirely absent and was replaced by a mass of fibrous tissue. The most common condition was one between these extremes. The author believes, as a result of his studies, that, while tearing of the sterno-cleido-mastoid at birth is by no means the only, or the chief, cause of caput obstipum, it can, nevertheless, not be excluded wholly as an etiological factor in the production of the deformity—*Centralblatt für Chirurgie*, No. 14, 1885.

Scarlatiniform Rash Produced by Intestinal Absorption of Ptomaines.—A patient observed by MM. Lépine and Molière presented at first nothing abnormal, except an artificial anus, the consequence of a strangulated hernia. One day he was suddenly seized with violent delirium, and M. Mollière noticed a considerable dilatation of the pupils. The skin was covered with a scarlatiniform rash, but there was neither fever nor angina. Poisoning by belladonna was at first suspected; but, after a careful examination, M. Lépine came to the conclusion that the symptoms were due to the absorption by the intestine of ptomaine, acting like atropine, and probably similar to that obtained by Zeulzer and Sonnenschein from putrid substances. After a short time acute conjunctivitis and fever supervened, and the patient died. At the post-mortem examination a highly-offensive substance was found in the intestine below the artificial anus, so that the possibility of an acute auto-intoxication cannot be disputed.—*British Medical Journal*, August 22, 1885.

Antipyrine in Acute Pneumonia in Children.—Dr. Arzutenky reports a number of cases of acute lobar pneumonia in children of four to eight years treated successfully by antipyrine. Ordinarily there was a reduction of temperature of 3° or 4° F. within three hours. In rare instances the temperature fell below the normal, but without, however, any symptoms of collapse. After a time the temperature rose again, but gradually and not with rapidity. The pulse did not always fall in proportion to the temperature. The author gave the drug three times a day in doses of three grains for an infant one year old, six grains for children from four to five years of age, and nine grains for those between ten and twelve years. Although the daily average temperature was reduced 2° or 3°, the proportion between the morning and evening variations remained about the same—*Revue de Médecine*, August 8, 1885.

Neuroses of the Stomach.—Dr. Oser divides the neuroses of the stomach into two classes, according as they depend upon a diminution or increase of muscular power in the organ. In the first group he notes: 1. Rumination, which results probably from a paralysis of the cardia. The mild forms may be cured by the avoidance of all liquid food, lying down upon the back after eating, and faradization of the cardia. The grave forms terminate fatally. 2. Pyloric insufficiency. For this the author advises distention of the stomach by carbonic acid. 3. Gastroplegia, or muscular weakness of the organ. In the second group are: 1. Spasm of the cardia, which may be diagnosed by the œsophageal bougie. 2. Spasm of the pylorus, which is due to reflex action caused by fissures. 3. General gastric spasm (the author does not say to what this is to be referred). 4. Peristaltic derangements, which are frequent in neurasthenia and hysteria. 5. Nervous vomiting.—*Revue de Médecine*, No. 32, 1885.

Acute Primary Tuberculosis of the Spleen.—Dr. J. Icharold relates the case of a young man twenty-five years of age, who was seized with a chill and a violent headache followed by heat and sweating. On auscultation numerous fine râles were heard, and percussion revealed an enlargement of the spleen. No other lesions were revealed by physical examination. There followed cyanosis, epistaxis, diarrhœa, and a slight degree of albuminuria; later delirium, and finally death on the eighteenth day. At the autopsy the spleen was seen to be markedly hypertrophied (three times its normal size), and it was filled with miliary tubercles. There was also some tumefaction of the solitary intestinal follicles and of Peyer's patches; but there were no signs of tubercles in the meninges, peritoneum, or lungs.—*Lyon Médical*, August 9, 1885.

Subcutaneous Ligature of the Brachial Artery.—Dr. Raimondo Cannizzaro, being called upon to ligate the brachial on account of a wound involving the radial and ulnar branches, made a valvular opening by drawing the skin tight, tied the artery with carbolized silk, and allowed the skin to slip back covering the wound. The superficial wound healed by first intention, and in seven days the patient left the hospital cured.—*Revue de Chirurgie*, August 10, 1885.

IODIDE OF POTASH IN THE TREATMENT OF PSORIASIS.—Dr. Hashurd reports a number of cases of psoriasis treated with iodide of potassium alone (*Hospitals-Tidende*, No. 17, 1885). In two-thirds of the cases in which the treatment was faithfully carried out a cure resulted; in the remaining third no improvement followed. The drug was given in very large doses, as much as eight or ten drachms a day, and continued for six or eight weeks. In one case the patient consumed between thirty and forty ounces of the iodide during the course of treatment. In only one instance were any of the characteristic symptoms of iodism manifested.

IODOFORM IN THE TREATMENT OF TUBERCULAR MENINGITIS.—Dr. Emil Nilsson reports, in *Hygiea* for July, 1885, three cases of tubercular meningitis occurring in one family. The first two children were treated in the usual way and died. Not long after the death of the second child a third one, a boy eight years old, began to grow thin and pale. A few months later he complained of headache and had several convulsions. When seen he lay in a semi-stupor with closed eyes, and could hardly be roused sufficiently to tell where he had pain. Calomel and iodide of potassium were ordered, but were soon discontinued because of the persistent vomiting. The symptoms of tubercular meningitis were well marked, and increased in severity until a fatal termination seemed to be approaching. The hair was then shaved off and an ointment containing ten per cent. of iodoform was smeared over the head and retained by a close-fitting cap of oil-silk. The inunction was repeated three or four times, and the cap was then left on for thirty-eight hours, at the end of which time it was removed and the head washed with soapsuds, alcohol, and vinegar. Within twenty-four hours there was an improvement in the little patient's condition, the muscular twitchings became less noticeable, sleep was more sound, and the restless tossing about in the bed ceased. There were some symptoms of absorption of the iodoform, and the odor of the drug was noticeable in the breath eight days after the cap had been removed. The child is now in perfect health.

TREATMENT OF ERYSIPELAS ON THE EXPECTANT PLAN.—There are numerous methods of treatment of facial erysipelas in vogue, each of which has its special advocates, and is supported by an array of facts showing its curative value. But in any case in which so many diverse plans are brought forward as efficacious in the treatment of a particular disease it is usually safe to assume that the disease is self-limited, and is not controllable by any specific remedy. Some cases reported by Dr. Carmelo Andronico in the *Giornale Internazionale delle Scienze Mediche*, No. 6, 1885, would seem to show that this is true also of facial erysipelas. The author treated fifteen successive cases of this affection, occurring among the inmates of a female penitentiary, on a purely expectant plan, and all recovered. They were of varying degrees of severity, but no remedies were exhibited either externally or internally, with the exception of alcohol. Wine in daily doses of about twelve ounces was given in a few cases in which there was marked delirium. None of the patients died, and all seemed to progress as favorably as, or even more so than those subjected to active medicinal treatment.

THE PROPHYLACTIC TREATMENT OF DENTAL CARIES.—In an article in the *Independent Practitioner* for August, 1885, Professor W. D. Miller, of Berlin, gives the results of a number of experiments made by him to determine the availability of various antiseptics in the prophylactic treatment of the oral cavity. Since in rinsing the mouth one does not usually keep the fluid in contact with the teeth for more than a minute, an antiseptic mouth-wash to be of use should be capable of devitalizing the fungi of the mouth in one minute or less. Of a number of substances used in the experiments the author found but four which were capable of devitalizing the fungi in the given time. These were bichloride of mercury (1–2,500), benzoic acid (1–100), salicylic acid (1–100), and pure Listerine. Of the four the bichloride was the most effective, as it possesses the advantage of penetrating more deeply into the cavities and between the teeth. It has one disadvantage, however, in its highly poisonous character, and although it is hardly probable that harm could result from its use in so dilute a solution, it nevertheless offers an objection to its use. With regard to salicylic acid it seems to be a question whether it is injurious to the teeth or not, and it should therefore, the author says, be used with caution. Listerine acted with considerable rapidity upon the fungi in the experiments made by the writer, and that substance or benzoic acid would seem to be preferable as a mouth-wash in the prevention of caries, if further experience should demonstrate that they exerted no injurious influence upon the dental substance.

POISONING BY PETROLEUM.—Dr. Duguet, of the Lariboisière, relates the case of a woman, aged forty-eight, who was brought into that hospital May 8th, having just swallowed about a pint of the ordinary petroleum of commerce with suicidal intentions. She at once felt a strong sensation of oppression along the œsophagus, and especially at the stomach, together with a sense of burning, and was in a very agitated condition. She exhaled a powerful odor of petroleum, and on vomiting being excited by ipecacuanha, with large quantities of milk, a good deal of petroleum floated on the ejections, as it did in those produced from the bowels by a clyster. All the urine of the patient was carefully preserved, and that passed just before the emetic was given contained a floating layer of petroleum, about one inch in thickness. On the day after her admission the floating petroleum in the urine amounted to about five drachms, but by the next day had diminished to one drachm, and then gradually disappeared. Some albumen, which at first was present, disappeared with the petroleum. During the first four days the petroleum prevented the urine from undergoing decomposition for ten days.—*Gazette des Hôpitaux*.

HERNIA OF THE STOMACH INTO THE SCROTUM.—Dr. Vogt (*La Presse Médicale Belge*) reports the case of a man, sixty years of age, with a scrotal hernia of the size of an adult head, who died in collapse with symptoms of local peritonitis, but without symptoms of strangulation. The autopsy showed, among other things, as a part of the contents of the hernia, the pyloric end of the stomach enormously dilated, the epiplon, the cœcum with the vermiform appendage, the ascending colon, the transverse colon, and the commencement of the descending colon. The stomach had an hourglass dilatation corresponding to the hernial ring; the lesser curvature, a little distorted above, was slightly elongated, while the greater curvature and the body of the organ were outside the ring. The extraordinary dilatation of the stomach had completely changed the relations of the organs in the abdominal cavity, so that the small intestines were carried to the left, and below, into the pelvis, and the liver had been drawn from the right side toward the median line.

PULMONARY ARTERITIS.—In an elaborate article on this subject, Dr. Rattone (*Archive delle Scienze Mediche*) formulates the following conclusions from a study of upward of fifty cases: (1) Pulmonary arteritis may be either acute or chronic (atheroma), the latter being the more frequent. (2) It may be primary or secondary, the primary form not leading to cirrhosis of the lungs. (3) The cases seen by the author of acute arteritis had their origin from a primary inflammation of the semilunar valves. (4) Chronic inflammation or atheroma may be met with in any portion of the pulmonary artery, but is more often seated in the vessels of medium size, and especially at their points of bifurcation; it is distributed symmetrically in the two lungs. (5) In this disease there may be seen not only the atheromatous patches, but also abscess, ulceration, and in some cases

calcification. (6) Pulmonary atheroma is entirely independent of a similar disease in the aorta; it may coexist with it, may exist without it, and may be absent when the aorta is profoundly diseased. (7) Pulmonary atheroma is met with constantly in mitral stenosis which has occasioned a certain degree of hypertrophy of the right heart; but may also be found with stenosis of the aortic orifice, in cor bovinum and other congenital defects. (8) The disease may occur in young subjects who have never suffered from heart-disease. (9) Atheroma of the pulmonary artery is a frequent cause of hæmoptysis, and may also give rise to thrombosis and hemorrhagic infarction. (10) Finally, as regards the cause of atheroma, the author agrees with Martin, that it is secondary to arteritis of the vasa vasorum.

Arsenic in Lupus Erythematosus.—Mr. Jonathan Hutchinson (*British Medical Journal*) narrates a case in which a gentleman was completely cured of lupus erythematosus by persistently taking five drops of *Liquor arsenicalis*, three times a day, for two years. In March, 1883, the patient suffered from several patches on the face and scalp. In February, 1885, the lupus was quite well. There were left only thin white scars, without any erythema or thickening at their edges. On the sides of the nose these scars were each as large as a shilling, that on the middle of the nose not so big. On the scalp, which was nearly bald, there were several scars as large as the end of one's thumb. The patient took arsenic regularly for fifteen months; he then had a sharp attack of shingles, and left the medicine off for a little time. No local remedy was applied to the patches on the nose while the arsenic was being taken, though a hair-wash had been sometimes used for the head. Mr. Hutchinson considers that the cure was entirely due to the arsenic, and suggests that a more careful administration of this drug should be tried in these cases, which are often only partially cured.

Cerebral Infantile Paralysis.—Dr. Strümpell has described this somewhat neglected disease in an article of which the following is an abstract: *Poliencephalitis acuta* occurs usually before the end of the first year, sometimes indeed in the first weeks of life. It begins acutely without any apparent cause, with fever, vomiting, general convulsions, and unconsciousness. These symptoms disappear as quickly as they began, leaving behind them, as a rule, complete paralysis of one-half of the body, which soon, however, in part disappears. The arm and leg usually remain more or less paralyzed, while the facial muscles are restored, though sometimes there is slight strabismus. In other cases the paralysis is a monoplegia, or a sort of ataxia alone is perceptible. There is never any degenerative atrophy of the muscles, though the growth of the affected limb is retarded. The paralyzed limbs are slightly contracted, and there is an exaggerated tendon reflex. Most of the patients suffer from subsequent epileptic attacks, which may be general or affecting only the paralyzed side. Athetosis is a very frequent accompaniment. In right-sided paralysis the speech is not infrequently affected, and the patients are usually imbecile, though the intelligence may not be weakened. Sensation is unimpaired. The seat of the disease is in the gray cortical substance in the motor region, where in older cases parencephalic lesions are always found. No autopsies have yet been made in the acute stage of the affection. The author remarks on the resemblance to spinal infantile paralysis, and believes that the two affections may be due to the same or similar etiological factors.—*Centralblatt für klinische Medicin.*

The Viscera in Epilepsy.—M. Vulpian (*Progrès Médical*) has communicated the results of certain experiments undertaken with the view of explaining the effects produced upon the action of viscera by epileptic seizures. He has induced fits of this kind in the dog by stimulating certain points of the sigmoid flexure. A few seconds after the convulsion began the heart-beats and the respiratory rhythm became slower, the latter even to absolute cessation, which was ascribed by M. Vulpian to a special excitation of the respiratory centre analogous to that produced by faradization of the central end of the pneumogastric or superior laryngeal nerve. In the dog, also, as in man, there is increase of the salivary secretion during the attacks. The amount of bile excreted is also in excess of the normal, while the passage of urine, on the contrary, is arrested. In a curarized animal it is possible to provoke epileptic attacks, which are limited in their manifestations to the internal organs. The phenomena then apparent do not differ from those observed in the same regions during ordinary attacks of epilepsy. After the paralysis of the motor nerves of the voluntary muscles the effects of stimulation of the nervous centres continue to travel along the still available visceral nerves, and to give rise to modifications of heart action, contractions or dilatations of vessels and of the pupils, contractions of the intestine and bladder, alterations of secretion, and the like.

Lateral Incision for the Prevention of Rupture of the Perineum.—Drs. Credé and Colpé, in the *Archiv für Gynäkologie*, discuss the practice of incising the perineum laterally in order to prevent its tearing centrally. The objections brought against it are these: (1) That the incision becomes an ulcer, and disturbs the healthy course of the lying-in. This they prevent by bringing the edges of the incision together by suture, with the result that primary union almost invariably follows. They have devised an ingenious method for applying this suture, but without the assistance of diagrams it is difficult to make this understood; we must therefore refer our readers to the paper, where they will find illustrations that make it perfectly clear. (2) That germs of disease may enter through the wound. In this respect the prospect is no worse than that from a torn perineum. Injury to the perineum only to a slightly appreciable extent increases the lying-in woman's chance of disease or death. Out of 2,000 deliveries in Leipzig, among those with uninjured perineums the death-rate was .954 and the morbility 2.94 per cent.; among those with torn perineums the mortality was .934 and the morbility 3.24 per cent. (3) That the incisions do not invariably prevent perineal rupture. To meet this the authors give a table of the percentage of cases in which lateral incisions were made, and of those in which rupture of the perineum occurred, in the practice of five different assistant physicians; and the table shows that the frequency of incision and the frequency of rupture stood in inverse proportion to one another. They also state that since incision has been practised, not a single case of complete perineal rupture has occurred. (4) That the cutting is painful; to which the authors reply, that it is done when the patient is already in much pain, so that she does not notice it. (5) That it leads to subsequent gaping of the vulva. This our authors deny. They believe, in short, that the lateral incision is extremely useful and absolutely harmless. We may add, in order to give an idea of their practice, that in primiparæ, lateral incision was practised in 25.9 per cent., spontaneous rupture took place in 10.4 per cent., and rupture in spite of incision in 2.9 per cent. In multiparæ, the corresponding figures are: lateral incision, 1.2 per cent.; spontaneous rupture, 2.4 per cent. They give figures also which show the influence of perineal ruptures in causing illness during the lying-in period. The percentage of primiparæ whom it was necessary to keep in the hospital longer than a fortnight, was 23.1 among those with perineal cuts or tears, 11.4 among those in whom the perineum was uninjured. In multiparæ it was only 6.8 per cent. The authors recommend that the incision should be made just after the acme of a pain, *i.e.*, just as it is beginning to pass off.

Dust Beef is what an Italian manufacturing firm calls its new, and, of course, improved form of beef-powder.

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THE DANGER OF CONSANGUINEOUS MARRIAGES.

THERE is no subject with regard to which statistical inquiries have furnished more contradictory results than that of the effects of consanguineous marriages. The general opinion, supported by social usage, religious belief, and even legislative enactment, is that such marriages entail almost always certain dangers. These dangers are various degenerative disorders, such, in particular, as idiocy, insanity, deaf-mutism, and, most of all, according to Dr. Devay, a specific taint which causes sterility in the offspring of these marriages. Dr. Bemiss, Dr. Howe, Dr. Arthur Mitchell, MM. Cadiot, Devay, Boudin, and Lasègue have published statistics showing the evil effects of these marriages; while MM. Bourgeois, Seguin, Dally, Voisin, and recently Dr. Charles F. Worthington, of Boston, give facts which seem to bear with equal or greater force in the opposite direction. Dr. Huth, in his elaborate work on "The Marriage of Near Kin," has also collected many statistics for and against the harmlessness of consanguineous marriages. Impressed with the untrustworthiness of much of the statistical data at hand, Dr. Worthington, of Roxbury, Mass., has taken the pains to study the subject anew, and to collect more complete histories of cases than has heretofore been done. It is very well known that the same circumstances and environment which lead isolated communities to intermarry, and thus furnish facts for the pessimistic statistician, may tend to produce the very diseases which are attributed to the too close mingling of blood.

Dr. Worthington collects the histories of one hundred and eight marriages. In eighty-six of these the relationship was that of first cousin; in four, first cousins once removed; in one, third cousins; in one, cousins, degree not specified; in one, uncle and niece; in two, brother and sister. All of these unions, save five, were fertile; the number of children being quite up to the average, viz., five. The children of these consanguineous marriages themselves married and had an average of over five children for each union, thus showing that neither directly nor indirectly did these marriages of near kin cause sterility. Out of a total of 413 children, the offspring of consanguineous marriages, about seventy-five per cent. (312) were reported healthy. Among the 101 unhealthy children the prevailing troubles were deaf-mutism (12 cases), insanity and idiocy (7 and 13 cases); while 15 died of phthisis, 16 died in infancy, 6 were "not robust," and 1 was epileptic.

It cannot be denied that twenty-five per cent. is a rather abnormal proportion of unhealthfulness, the ratio of idiocy and deaf-mutism being especially large. Dr. Worthington adduces facts, however, which show that these conditions might be, and in many cases certainly were, due to a special morbid inheritance with which the marriage had nothing to do.

The facts presented show that consanguineous marriages are, in the majority of cases, perfectly harmless and carry no specific taint to the children. It cannot be doubted, however, that if there is any morbid tendency in either parent, there is great danger of its being intensified in the children. This is the conclusion reached also by breeders. One alliance of blood relations may be perfectly harmless, or even beneficial, but if kept up, it is sure to produce deterioration. Now since it is often so difficult to say absolutely that an individual has no morbid taint, it follows that we must, despite favorable statistics, cling to the present view that consanguineous marriages are a source of danger. In other words, two cousins who are apparently healthy have a slightly greater chance of having children with some degenerative taint than two apparently sound persons who are not related.

THE RADICAL TREATMENT OF THE DISEASED CERVIX UTERI.

THE true centre of the gynecological system is probably the cervix uteri. From it radiate the innumerable pains and irritations, and out of it drip the succulent secretions which develop into overshadowing magnificence the science of the pathological woman. Imagination quite fails in any attempt to estimate the amount of laborious thought and ingenious investigation which this little organ has called forth. The cervix uteri seems to be of comparatively little use to woman, but it has been an immense stimulus to man. Yet we can hardly say that he has even now entirely mastered it. There is certainly nothing that therapeutical enthusiasm put to its tensest strain could devise with which this little organ has not been conscientiously bombarded. But it still will keep red, secretive, tender, and ectropic.

It cannot be, however, but that the intellect of man, with its four extra ounces of encephalic substratum, will in time overcome the ounce of perverse flesh which drags down so many of the gentler sex.

We observe, in the New York *Medical Journal* for June 27th and July 4th, an article which appears to point a way toward such a supreme triumph. Dr. Simon Baruch, the author of the article in question, calls attention to certain facts in the physiological and pathological history of the cervix which he thinks have not yet been sufficiently appreciated. These are that the cervix uteri is really a "vast gland;" that it has a mucous lining full of intricate windings and furrows, and containing an enormous gland-supply hidden beneath it and penetrating to a considerable depth into the connective-tissue. This glandular structure is not reached in the ordinary topical applications to the cervix, hence no effective treatment results. To secure success these glands must

be laid open, curetted, and the reagents applied directly to the diseased tissue. This view is rational, and quite in accordance with the most fundamental rule in the treatment of diseased surfaces. In laceration of the cervix, also, when a condition calling for an operation exists, one of the most important things indicated is a removal of the diseased and hyperplastic tissue.

Such removal of diseased cervical tissue is also believed to have an important influence in preventing the development of cancer. This assertion, which is based upon sound reasoning from the known facts of pathology, deserves careful attention from physicians who have the care of, but are not treating, patients with chronic inflamed and lacerated cervices.

Dr. Baruch summarizes his views as follows: "1. A thorough knowledge of the anatomy, physiology, and pathology of the cervical follicles will simplify the treatment of many uterine affections. 2. The cervix uteri represents a large gland of active and important function in the various sexual relations of woman. 3. In the majority of the more common diseases of the uterus the mucous membrane and its follicles play the most important rôle. A recognition of this fact will make treatment more successful. 4. Metritis, subinvolution, hyperplasia with catarrh, erosions, etc., must be studied in connection with the glands of the cervix. 5. In obstinate cases medicinal applications fail because the secreting surfaces of the follicles are not reached. Scarification and the curette are valuable adjuncts in nulliparous women, or in parous women without cervix laceration. 6. In parous women with laceration, trachelorraphy is the most valuable procedure. As a simple plastic operation it will fail. Success depends on extirpation of the follicles, which is more important than removal of the cicatricial plug. 7. The microscope demonstrates the dependence of catarrh, ulceration, erosion, and hypertrophy of the cervix, and often also of the body of the uterus, upon the glandular structure of the cervix uteri. 8. The cervical follicles are significant as elements in the pathology of cervix cancer, because the microscope demonstrates the dependence of the latter upon erosions which are based upon the gland structure. 9. Laceration and erosion must be regarded with suspicion, as possible sources of future malignant disease. In operating for their removal, extirpation of the cervical follicles must be unsparing."

A NEW THERAPEUTIC PRINCIPLE IN THE USE OF MINERAL WATERS.

THE chemical composition and the therapeutic action of mineral waters have engaged the attention of physicians for a long time. That mineral waters are efficacious in the treatment of certain classes of affections is well established, especially those which are benefited by influencing the mucous membrane of the alimentary canal.

Recently Sydney Ringer, of London, and Dr. Hayes, of Aberdeen, have emphasized the important influence which the chlorides exert in accelerating intestinal action, and thus far have confirmed the earlier experiments of von Voit with reference to the influence of the chlorides, especially the sodium chloride, on the oxidation of albumen and the consequent increased formation and elimination of urea.

Mineral waters have of late years been used largely as saline purgatives, depending chiefly upon the use of those especially rich in sulphate of soda and magnesia. But von Mering, Frerichs, and Henry Thompson have for a long time urged that it was important to distinguish between those waters which are promptly purgative and those which contain a large combination of the *chlorides* of sodium and magnesium. Frerichs, especially on clinical grounds, has pointed out that in prescribing purgative waters it is well to have a more careful regard to their differences in chemical composition and their consequent different effects. If, he says, it is merely desired by increasing the secretion of the intestinal glands to render the contents of the intestines more fluid, and to evacuate them, all the aperient waters are more or less useful, according to the quantity of purgative salts they contain; but their continuous use, he adds, interferes with the process of digestion, and thus affects the general health. The effect, however, he says, is very different when, besides the sulphate of soda and magnesia, large quantities of the chloride of sodium are present, as in some of the more noted mineral waters, for then we have the favorable influence of the chloride upon digestion and tissue-changes generally. Sir Henry Thompson has long advocated the use of a mineral water rich in chlorides as well as in sulphates. In his lectures he gives the results of experiments with natural and artificial compounds based upon this principle, and reaches the conclusion that in the natural mineral water, rich in chlorides as well as sulphates, the dose may be continuously diminished, and prolonged treatment is unattended with the exhausting and irritating effects following the use of waters which contain especially large quantities of sulphate of soda. Here, then, chemical research and clinical experience harmonize, and physicians are coming to regard this old therapeutic agent among the large number of mineral waters as especially suitable for prolonged use, when taken, as it now can be, in its undiluted and natural state.

THE SIXTH VOLUME OF THE INDEX CATALOGUE.

THE "Sixth Volume of the Index Catalogue of the Library of the Surgeon-general's Office" has been published. It includes references from Heastie to Insfeldt. The herculean labor of its compilation can be reasonably estimated when it is understood that the volume is made up of seven thousand nine hundred authorities, representing two thousand five hundred and forty-three volumes, and seven thousand two hundred and fifty pamphlets. It also represents fourteen thousand five hundred and ninety subject-titles of separate books and pamphlets, and thirty-five thousand two hundred and ninety titles of articles in periodicals. The particularly interesting parts of the bibliography are those referring to hereditary, hernia, hip-joint disease, homœopathy, hooping-cough, hospitals, humerus, hydrocele, hydrocephalus, hydrothorax, and insanity.

Dr. J. S. Billings, the talented librarian, still has his name upon the title-page and may he be spared to complete a work, the like of which has never before been undertaken.

DR. GEORGE W. FISH, United States Consul at Tunis from 1878 to 1882, died at his home, in Flint, Mich., on September 20th, aged sixty-nine years.

News of the Week.

A CHANGE IN THE MODE OF DISCHARGING LUNATICS FROM ASYLUMS.—The authorities have decided that the city shall no longer be burdened with the costs of proving to be insane persons whose release from the municipal lunatic asylums is sought by their relatives, or by petty lawyers desirous to acquire notoriety. Hitherto it has been the custom to make returns to writs of habeas corpus in such cases, in accordance with the statements of the medical officers in charge of the asylums. As those statements were invariably that the persons whose release was sought were insane, issues were raised that had to be tried. These trials were annoying and expensive. The purpose of the Corporation Counsel is hereafter to make returns in such cases, merely setting up that the persons indicted in the writs are held by the Commissioners of Charities and Correction because they were committed to them as insane, and because the Medical Superintendent of the New York City Asylum had not given certificates that they were fit to be at large. By this course it will fall upon the courts to ascertain, in some way satisfactory to them and inexpensive to the city, whether the persons under restraint are sane or insane.

DEATH OF DR. WILLIAM CHARLES HUNTER.—We regret to announce the death, on the 20th inst., of Dr. William Charles Hunter, of this city, in the fifty-sixth year of his age. Dr. Hunter was born at Burke, N. H., and was graduated at the New York College of Physicians and Surgeons in 1857. He was once Demonstrator of Anatomy in the medical department of Dartmouth College, with Dr. E. R. Peaslee. He was the author of many papers in medical journals. He was a member of the Academy of Medicine, the County Medical Society, and the New York Pathological Society, and an officer of the Society for the Relief of the Widows and Orphans of Medical Men. Dr. Hunter's health had begun to fail several years ago, and lately he had suffered from renal and cardiac troubles.

THE RESOURCES OF THE DRUGGIST.—Druggists average from $5 to $15 per month from each moderately large family in this city.

DOCTORS' ENDORSEMENTS OF TRADESMEN. — "A writer in an American contemporary, the *New England Medical Monthly*, deplores the debasement of the literature of circulars by the names and addresses of prominent New York physicians which are now printed on carpenters' and plumbers' circulars as advertisements. Since literary enterprise has stooped to tradesmen's handbills, we would suggest as the next step—their tools."—*Medical Press and Circular.* Our esteemed English contemporary is very quick to pick up an item that reflects on the American profession, even if it comes from some irresponsible penny-a-liner. The "debasement" referred to is certainly of very small extent, and would hardly be discovered except by a most industrious garbage-hunter.

THE OVARIOTOMY RECORD "BROKEN."—Mr. Lawson Tait reports in the *Provincial Medical Journal* a series of one hundred and twelve operations for ovarian and parovarian cysts, without a death. These operations were performed between January 1, 1884 and August 5, 1885. All the operations were completed. They were performed without Listerism; and this settles, forever, for Mr. Tait, the question as to the utility of Listerism.

INTERNATIONAL MEDICAL CONGRESS.—On receiving notice of his appointment as one of the secretaries of the Section on Laryngology, Dr. E. Fletcher Ingals declined, on the ground that lack of harmony in the profession make the duties too burdensome. The following additional resignations have been announced: Dr. John C. Dalton, New York, President Section of Physiology; Dr. E. L. Shurley, of Detroit, Council of Section on Laryngology; Dr. Thomas M. Markoe, New York, and Dr. T. A. McGraw, of Detroit, Council of Section on Surgery; Dr. Wm. H. Welch, of Baltimore, Secretary Section on Pathology; Dr. Thomas T. Sabine, New York, Council of Section on Anatomy; Dr. E. G. Loring, New York, Council of Section on Ophthalmology.

DEATH OF A MEDICAL EDITOR.—We learn with regret of the recent death of Dr. Paul Boerner, of Berlin, at the age of fifty-seven years. Dr. Boerner was editor of the *Deutsche Medizinische Wochenschrift*, one of the leading German medical weeklies.

A WESTERN VIEW OF THE INTERNATIONAL CONGRESS.—Our European brethren may perhaps appreciate the fact that the American Medical Association, in its action regarding the Congress, has not voiced the sentiments of either the majority or the best of the members of the profession in America, but we are none the less disgraced in their opinion. It is perhaps wrong to lay this trouble at the door of the Association as a whole, for, as in every other organization of a similar character, it will be found that the active management is in the hands of a very few individuals; but as the matter now stands there is nothing else to bear the responsibility of the family quarrel. With all respect to its venerable editor, the *Journal of the American Medical Association* appears to be the only obstacle in the way of an amicable rearrangement of the committees, and a resumption of the strictly scientific work, which, if undisturbed, will make the coming Congress fully as successful as any of those which have preceded it. Pertinacity is an excellent quality under exceptional circumstances, but in the present instance, concessions for harmony's sake would be in much better taste.—*Western Medical Reporter.*

CHICAGO PHYSICIANS AND THE CONGRESS.—The International Congress, from the standpoint of the profession here, has a gloomy outlook. We cannot see how, from the present situation, the gathering can be in any sense international. There may be a large meeting, but if only American doctors attend, and if, as the prospect is certain, many of the most distinguished members of our profession are absent, what is the use of a Congress at all! Drs. Lyman, Hyde, Jackson, Parkes, and Senn have publicly announced that under the present organization they *could not* serve in the positions to which they have been appointed. Not only have a large number of the strongest men in the country declined to participate, but so large a class that the idea is growing among the profession here that the Congress will not be worth

attending, that it is a foredoomed failure as an international gathering. This feeling is heightened by the indications from abroad of a growing sentiment of dissatisfaction with our ways of doing, which is entertained by the profession of Europe, and which promises to reduce to zero the small delegation of eminent visitors we had any reason to expect under the most favorable auspices.—*Chicago Cor. of Boston Medical and Surgical Journal.*

THE COOK COUNTY (ILL.) INSANE ASYLUM—Dr. Spray, formerly superintendent of this asylum, has been re-elected. Dr. James G. Kiernan, whom he succeeds, attempted to introduce some reforms, but he seems to have lacked the tact or executive capacity to accomplish anything. The institution appears to be run for the benefit, not of the lunatics, but of "the boys."

DR. BRADLEY RELEASED.—Dr. Bradley, of Birmington, England, who will be remembered as the victim of a charge of criminal assault by a hysterical female whom he was so unfortunate as to attend and to be left alone with for a short time, has, after seven months' imprisonment, been released by order of the Home Secretary. The judge (Lord Coleridge) who tried the case is said to have expressed himself as convinced of the injustice of the verdict rendered. A testimonial is being subscribed to for the pecuniary relief of, and to express the professional sympathy for, the unfortunate physician.

A WRITER ON MEDICAL EDUCATION, commenting on the popular interest in medical topics fostered by medical bulletins from the sick-beds of great men, and especially on the fascination which the germ-theory seems to have for everybody at the present time, remarks that in the wilds of the West a cowboy recently shot another for calling him a d—d microbe.

ANOTHER SUCCESSFUL TRANSPLANTATION OF THE RABBIT'S EYE.—Dr. H. W. Bradford reports in the *Boston Medical and Surgical Journal* a case of enucleation with replacement of the human globe by that of a rabbit. The patient was a seaman, aged thirty-five, with an atrophied globe, the result of an injury in childhood. The result of the operation was fairly successful, the transplanted organ taking up nourishment and establishing a circulation. No attempt was made to secure vision, the object being to obtain cosmetic effects.

MONTREAL ANTI-VACCINATIONISTS.—We have received a letter circular which has been widely distributed in Montreal. It consists of a shriek against vaccination in six paragraphs. "Don't permit your precious little ones to be vaccinated! Vaccination is not only unnatural, filthy, and unclean, but positively dangerous to health and life. Scores of children in Montreal have been poisoned with a loathsome disease by vaccination," etc. It is a serious question whether in times of an epidemic society ought not, for its own safety, to suppress such literature.

A WEAK MEDICAL LAW.—According to the *Call*, a certain Dr. Kellogg was arrested in San Bernardino a few days since for practising without a license. The jury disagreed. He says this is the forty-second time he has been arrested on the same charge, and he has never been convicted.

THE CHAIR OF ANATOMY in the University of Vermont has, it is reported, been offered to Dr. John B. Deaver, Demonstrator of Anatomy in the University of Pennsylvania.

A HOSPITAL AT DARTMOUTH.—An association has been formed by the Dartmouth College authorities for the purpose of establishing a hospital for those who come to the medical college for treatment, and where students in any department may be cared for when sick.

THE CHOLERA is steadily decreasing in severity in Spain, but is increasing in certain parts of Italy. This is particularly the case in Palermo. Within a week the mortality rose from 3 daily to 185. The inhabitants were seized with a panic and 30,000 fled from the city. About a week ago there was a grand illumination and universal celebration in honor of the appearance of the vision of a saint bearing the assurance that the epidemic would soon disappear. A few days later the people were mobbing the sanitary officers whenever an attempt was made to disinfect places where the disease prevailed.

A NEW CANCER CURE.—Under this title we mentioned recently, on the authority of one of our exchanges, that Dr. Pampilo, surgeon to St. Peter's Hospital, of Pernambuco, had discovered a new remedy for cancer in the juice of piscidea erithrina. A subscriber in Pernambuco writes us that, with some exceptions this notice is strictly correct. The name should be Numa Pompilio. The bearer of the name is not a surgeon, but a dentist. He is not employed in St. Peter's Hospital, but in the Hospital Dom Pedro II. He did not discover the virtues of the remedy, but was employed by a lawyer of the town to prepare it in a certain way, so as to better preserve it. Finally, piscidia erithrina has never cured cancer.

KEEPING OUT THE CHOLERA.—The Neapolitan authorities are determined at all events to prevent the introduction of cholera from without, however lax they may have been in providing against its spread when once admitted. Dr. Rummo, who had been sent by the government on a scientific mission to Spain, brought back two sealed tubes containing cholerigenous virus, with which he proposed to make some investigations to determine the accuracy of Ferran's methods. The municipal authorities, however, would not allow Dr. Rummo to bring the tubes into the city, and he has therefore gone with them to the island of Asinara, where he will be able to inoculate animals as much as he pleases.

SUICIDE OF A WOMAN PHYSICIAN.—Dr. Adelaide Richardson, of Mount Holyoke Seminary, committed suicide last week during a fit of temporary insanity. Dr. Richardson was forty-seven years old. She received her medical education at Ann Arbor, Mich.

A CIVIL SERVICE EXAMINATION will be held in the Post-office Building, on October 1st for applicants for positions as Medical Reviewers and Pension Examiners. Applications must be made to the Secretary of the Civil Service Commission, Washington.

THE UNIVERSITY OF VIENNA.—During the summer quarter, just passed, there were 5,122 students at the University of Vienna, 2,310 of which were students of medicine.

Reviews and Notices.

LARYNGOSCOPY AND RHINOSCOPY IN THE DIAGNOSIS AND TREATMENT OF DISEASES OF THE THROAT AND NOSE. By PROSSER JAMES, M.D. Fourth Edition, Enlarged, Illustrated with Hand-colored Plates. Pp. 233. New York: William Wood & Co. 1885.

THE author of this little manual has enlarged and revised the present edition. The changes will be found principally in the chapters devoted to rhinoscopy, to diagnosis, and to therapeutics. Motor-laryngeal affections have been more fully considered, but the former classification has been adhered to. The properties and application of cocaine are described. The various apparatus in use are shown in the wood-cuts. An interesting chapter is devoted to the history of laryngoscopy. The general make-up of the book is excellent.

A TEXT-BOOK OF PHYSIOLOGY. By MICHAEL FOSTER, M.A., M.D., F.R.S. Third American from the Fourth and Revised English Edition, with extensive Notes and Additions. By EDWARD T. REICHERT, M.D. With 271 Illustrations. Philadelphia: Lea Brothers & Co. 1885

IN the fourth edition of his Physiology, Professor Foster concluded to place nearly all the reading matter in uniform large type. In the present volume, therefore, we find this plan carried out. It is certainly wiser to place in a text-book only such matter as is worth large type, and the new arrangement is, on the whole, to be commended. Dr. Reichert's additions in histology and critical comment add very much to the value of the work for students.

ELEMENTS OF MODERN MEDICINE. Designed for the Use of Students and Practitioners of Medicine. By R. FRENCH STONE, M.D., Professor of Materia Medica, Therapeutics, and Clinical Medicine in the Central College of Physicians and Surgeons, Indianapolis. New York: D. Appleton & Co., 1, 3, and 5 Bond Street. 1885.

THIS book was evidently bound for pocket use, and contains material on the principles of pathology and therapeutics, and many memoranda and tables for reference; the title-page says "useful memoranda" and "valuable tables." The first fourteen pages exhibit a review of "the recent progress and the present condition of medical science and of medical practice." Here is found a large amount of abstruse indoctrination concerning "molecular mechanism," "physical basis of life," "dependence of the vital processes on oxygenation," "modified cell-life," etc., to which the average medical student and practitioner will take with usual avidity. The remarks with reference to blood-letting are not altogether uninteresting, especially in the light of "past experience."

The first *part* is devoted to "General Pathology," including the etiology and anatomical characters of disease, symptoms and signs of disease, modes of examining patients, prognosis and treatment of disease, and "Miscellaneous Topics." Surely the term thus used is very much "congested," as our English brethren say about London Bridge.

Part II. is on Materia Medica and Therapeutics, and while it contains a certain amount of good material, it is sadly in need of a thorough revision. The treatment of "gonorrhœal ophthalmia" consists of a prescription containing sulphate of zinc, sulphate of atropia, carbolic acid, and rose-water, of which "three or four drops" are to be applied "three or four times daily, and also externally with linen cloths." What a method! And it stands without qualification or additional direction.

The treatment for "biliary calculus," recommended as affording the "promptest relief," consists in the use of an enema containing tartar-emetic, tincture of opium, and tepid water; followed immediately by four to eight ounces of olive oil, "taken by the stomach." The *modus operandi* is given as follows: "The opium and tartar-emetic relieve the pain and relax the spasm of the gall-duct, while the efforts of vomiting cause a portion of the oil to come in contact with the roughened surface of the calculi and facilitate their passage." This theory is certainly ingenious.

The author's views concerning fevers must be epitomized: All idiopathic, essential, and non-contagious fevers have a common proximate cause, consisting of the "waste products" which constitute "*the initial factor of the febrile process*," and find their way into the blood and tissues in a state of change or decomposition; this azotized material may originate spontaneously; when retained in the system a sufficient length of time, and in sufficient quantity, "the normal embryonic or *germinal granules of the white blood-corpuscles* become infected by the toxic elements thus engendered." This is a novel way of setting forth a chemical theory.

Under the heading, "Method of Conducting Post-mortem Examinations," the directions for examining the thorax and abdomen lack that definiteness in detail which is so essential to the best aid to those unaccustomed to perform autopsies.

With reference to chloroform the author says: "So far as known, no fatal result has yet occurred from the use of chloroform in *parturition;*" an indescribable bit of ignorance which should never have been allowed to come to the surface. The directions "on the slightest approach of symptoms of heart-failure or asphyxia" are too indefinite, and, so far as faradization is concerned, might with equal chances lead to the death rather than to the resuscitation of the patient.

Speaking of mydriatics, the author says that "from one-sixteenth to one twenty-fourth of a grain of atropine administered hypodermatically will antagonize one grain of morphine." Don't trust it, "it may fool thee;" better study the effects than labor automatically.

What is equally trying, however, is the fact that the directions for "Microscopical Examination of the Urine," down to the words, "or tail attached" (twenty-two lines), are in the identical language used in "THE MEDICAL RECORD Visiting List," and are not included within quotation marks.

For the "Chemical Examination of the Urine" there are only directions for the use of heat, nitric acid, and picric acid, and no mention is made of the recent delicate tests which have been accepted as especially valuable.

"The diseases for which hæmatics are used *originate in the blood.*" When was this demonstrated? "*These drugs*"—opium and belladonna—"*acting in an opposite manner on respiration, brain, skin, pupil, and circulation.*" True to only a certain extent, and, therefore, the statement should have been qualified, else harm rather than good may be done.

It is unfortunate that so much good material should be adulterated to the extent it is with unscientific and in some instances dangerous statements.

THE TREATMENT OF OPIUM ADDICTION. By J. B. MATTISON, M.D. Pp. 49. G. P. Putnam's Sons. 1885.

DR. MATTISON'S monograph on this subject is suggestive and interesting. The reader is impressed with the earnestness and conviction with which the writer recommends his methods—evidently the outcome of years of careful observation and study of the opium habit. Dr. Mattison takes strong grounds against the German method (Levinstein's), that of complete and immediate withdrawal. He characterizes it as a "barbarous plan," "positive malpractice," "utterly inexcusable."

He recommends a mean between the extremes of abrupt cessation of the use of the drug, and the very gradual decrease which tends to exhaust the patience of the patient. He relies on bromides, preferably bromide of sodium. He begins with a "preliminary sedative," ob-

tainable in several days. The initial dose is 60 grains twice daily, at intervals of twelve hours, increasing the amount 20 grains each day, and continuing it five to seven days, until reaching a maximum dose of 100 to 120 grains twice in twenty-four hours. In the meantime the opiate is decreased, at first from one-fourth to one-third the usual amount taken daily, and a little less rapidly at the last, so that from the eighth to the tenth day it is entirely abandoned. If patients are too weak and anæmic to take the above treatment at once, it must be preceded by a tonic course. Bromidism, if produced, soon subsides, and leaves no unpleasant after-effects. Of course individual idiosyncrasies should be regarded. He controls insomnia by giving the bromide dose and decreasing morphine dose at night till the latter has been stopped, then he uses fluid extract of coca, with or without capsicum, which controls at the same time characteristic restlessness. Hot baths and cannabis indica are also valuable agents.

For relief of neuralgic pains he places electricity, the local application of ether, and hot water at the head of the list. He gives a mercurial cathartic at the outset of the treatment, and uses afterward mild laxatives. If there is persistent diarrhœa, thirty-minim doses of fluid extract of coca, and sixty-grain doses of subnitrate of bismuth every two or four hours are useful remedies. He makes no restriction in regard to diet, except when stomach and bowels require it. Vomiting, he maintains, is not of so frequent occurrence under this plan of opium withdrawal.

Cocaine, hypodermatically used, after repeated trials, proved much inferior to a reliable fluid extract of coca. The after-treatment exhausts the list of tonics. The writer offers little that is new in this direction.

This work is calculated to inspire the flagging courage of physicians who undertake to overcome the opium habit. The author makes the cure of the "toxic neurosis," as he calls it, appear not very feasible, but not such a difficult task as it is often considered.

A Manual of Human Physiology, including Histology and Microscopical Anatomy, with Special Reference to the Requirements of Practical Medicine. By Dr. L. Landois. Translated from the Fourth German Edition, with Additions, by William Stirling, M.D., Sc.D. With three hundred and eighteen illustrations. Vol. II. Philadelphia: P. Blakiston, Son & Co. 1885.

We have nothing but commendation for the second and last volume of Professor Landois' work, and we can only say again what was stated when reviewing the first volume, that it is the most complete and satisfactory text-book on physiology extant. The translator and publisher have each done something to increase the value of the volumes. Dr. Stirling has added numerous useful annotations, and a large number of new plates from the works of Bramwell, Ross, and others have been inserted. We wish that every medical student and physician could be drilled on these volumes.

Growth of the Hair.—Professor Molleschot, of Turin, has published the results of a long series of investigations, from which he concludes that the hairiness of an individual is in inverse relation to his body weight. The heavier the person the less rapid is the growth of his hair. The latter is greater in summer than in winter, the reverse of what obtains in the lower animals. He also made the astounding discovery that cutting the hair makes it grow more abundantly. It is curious to see how much labor is often expended to but little purpose.

Shakespeare's Physician.—In the churchyard at Fredericksburg, according to the *Allg. Wiener Med. Zeitung*, is a tombstone with the following inscription: "Here lies Edward Heldon, practising physician and surgeon, friend and companion of William Shakespeare, of Avon. He died after a brief illness in the year of Our Lord 1618, æt. 76."

Reports of Societies.

AMERICAN GYNECOLOGICAL SOCIETY.

Tenth Annual Meeting, held in Washington, D. C., September 22, 23, and 24, 1885.

Tuesday, September 22d — First Day — Morning Session.

The Society met in the Columbia University, and was called to order at 10 A.M., by the President, Dr. William T. Howard, of Baltimore.

The following members were present: Drs. W. T. Howard, W. L. Richardson, of Boston; Frank P. Foster, of New York; M. D. Mann, of Buffalo; Joseph Taber Johnson, of Washington; H. P. C. Wilson, of Baltimore; W. T. Lusk, of New York; J. R. Chadwick, of Boston; R. B. Maury, of Memphis; R. S. Sutton, of Pittsburg; W. H. Baker, of Boston; John Byrne, of Brooklyn; B. B. Browne, of Baltimore; J. P. Reynolds, of Boston; T. A. Emmet, of New York; E. W. Jenks, of Detroit; H. J. Garrigues, of New York; S. C. Busey, of Washington; Ellwood Wilson and William Goodell, of Philadelphia; T. A. Reamy, of Cincinnati, and Theophilus Parvin, of Philadelphia.

INVITED GUESTS.

The following were unanimously elected: The members of the Washington Obstetrical and Gynecological Society, Drs. R. P. Wilson and W. P. Chinn, of Baltimore; E. C. Dudley, of Chicago; F. Howard, S. J. Radcliffe, R. Reyburn, J. F. Dyer, G. C. Ober, of Washington; J. M. Browne, U.S.N.; and Dr. De Roaldes, of New Orleans.

Dr. Samuel C. Busey, of Washington, then delivered

THE ADDRESS OF WELCOME,

in which he extended to the Society the greetings of fellowship of the Washington Obstetrical and Gynecological Society, and its hospitalities of fraternity. Others have come to fill the places of the lamented dead, and the future gives promise of even greater progress and higher excellence in the aims of conscientious and scientific medicine.

The first paper was read by Dr. Busey, and was entitled

THE NATURAL HYGIENE OF THE CHILD-BEARING PERIOD.

The hygiene of pregnancy relates to the preservation of the health of women during those periods of her life-history intervening between conception and the commencement of labor. The processes characteristic of that period were those of transformation, development, and growth, and were physiological; nevertheless they were terminated by more or less violence and injury to both mother and child. The unavoidable mortality, however, is small.

The hygiene of the child-bearing life includes that of pregnancy and the puerperium. They are equally important and interesting. But the hygiene of pregnancy has a much broader significance than a classification and detailed description of the disorders of pregnancy and the methods of prevention.

The concurrent succession of natural phenomena and results which with such uniformity subdivide the course of normal child-bearing life into epochs, which distinctly mark the evolution, climax, and decadence of productivity, point with unerring certainty to the operation of general laws for the female economy.

From its beginning to its end pregnancy is characterized by continuous and progressive functional and organic activity, and along its entire course the signals of danger are displayed in quick succession at short intervals.

Puberty, matrimony, pregnancy, parturition, lactation,

the post-pregnant restoration of ovarian activity, and the menopause, constitute epochs in the life-history of child-bearing women. Upon the course, progress, and succession of these events depend health, life, and longevity. Each has its physiological characteristics, and each may be associated with a variety of pathological conditions.

First pregnancies are the most dangerous, and the danger is increased by too early and too late primiparity. The fertility of the female increases from the commencement of the child-bearing period until the climax is reached, and then declines to its extinction. The age of greatest safety of pregnancy coincides with the age of greatest fecundity.

Dr. Busey then referred to the period of lactation as an important epoch in child-bearing life, and afterward directed attention to the cessation of ovarian life, precocious nubility and precocious puberty.

The paper was discussed by Dr. J. R. Chadwick and Dr. J. P. Reynolds, of Boston, and the discussion was closed by Dr. Busey.

Dr. H. J. Garrigues, of New York, then read a paper on

PUERPERAL DIPHTHERIA

based on twenty-six cases treated by him in the New York Maternity Hospital, and one in the New York Infant Asylum, during the years 1882 to 1884. The diphtheritic infiltration was commonly light gray; appeared first as small discrete spots which spread and fused together, forming large thick patches, intimately connected with the subjacent tissue.

Under the name of "dissecting metritis," he had described eight cases in which a large portion of the muscular tissue separated and was finally expelled from the cavity of the uterus.

As regards etiology, everything that protracts labor, or causes wounds of the genitals, the introduction of the hand into the womb, etc., predisposed to the disease. The real cause, however, was infection.

The first symptom was fever; temperature mostly between 103° and 104° F.; generally the patient complained of pain; the lochia were usually scanty, dirty grayish-red, and offensive, but might be normal. The general symptoms generally preceded the local changes by several days.

Concerning diagnosis, the infiltration must be distinguished from the yellow color which abraded surfaces take under the bichloride of mercury bandage.

The prognosis, as to event, was doubtful; five out of his twenty-nine patients having died. Recovery was complete, except in dissecting metritis, where the loss of substance might interfere with future pregnancies, and predispose to rupture of the uterus.

The prophylactic treatment consisted in limiting vaginal examinations as much as possible, thorough antisepsis by means of the bichloride of mercury, etc.

The curative treatment included thorough cauterization of all affected parts within view with a solution of equal parts of chloride of zinc and distilled water; washing out the uterus with a bichloride solution—1 to 4,000—and leaving within the cavity a suppository containing a hundred grains of iodoform. This was repeated once in twenty-four hours, and a vaginal douche, with the same solution, was given every three hours.

The general treatment consisted of the use of ergot, quinine, morphine, alcohol, and digitalis; and the temperature was controlled by the use of cold.

Dr. W. T. Lusk, of New York, spoke of the good results which had followed the use of the antiseptic pad described by Dr. Garrigues, and also related one case which seemed to illustrate the possibility of the disease being communicated by direct contagion.

Dr. H. P. C. Wilson, of Baltimore, had been much interested in the paper, and also the remarks by Dr. Lusk, because he had avoided all bandages or napkins which might possibly obstruct free discharge of the lochia.

Dr. W. L. Richardson, of Boston, agreed entirely with what had been said by Drs. Garrigues and Lusk.

The paper was further discussed by Dr. John Byrne, of Brooklyn, who referred to deformities of the vagina, etc., as the result of this disease; by Dr. Frank P. Foster, of New York, and by Dr. M. D. Mann, of Buffalo.

The Society then adjourned.

TUESDAY—FIRST DAY—AFTERNOON SESSION.

The Society was called to order by The President.

Dr. Joseph Taber Johnson, of Washington, read a paper entitled

FOUR CASES OF OÖPHORECTOMY, WITH REMARKS.

The remarks pertained chiefly to the desirability of early diagnosis and early operation in cases of disease of the ovaries and tubes which might justify the performance of Battey's or Tait's operation for their relief.

The first case was one of chronic ovaritis and menstrual epilepsy in a patient twenty-nine years of age. Both ovaries and tubes were removed, and with improvement in the patient's general condition.

In the second case, Dr. Johnson removed both ovaries and the tubes, and the operation was followed by complete recovery; the patient being well both in mind and body.

The third case occurred in Miss S——, twenty-four years of age, and was one of excessively painful dysmenorrhœa, with all the accompanying grave phenomena. Both ovaries and tubes were removed, followed by an excellent recovery.

Mrs. X——, forty years of age, and the mother of three children, determined to have the operation performed, and finally Dr. Johnson removed both ovaries and tubes; the patient died on the sixth day of exhaustion, and the autopsy gave little evidence of the cause of death.

Dr. Johnson then discussed the question of early diagnosis and early operation in suitable cases. Even under discouraging circumstances the operation was one of the most successful in modern surgery, and he suggested that if our means of diagnosis were so perfect as to give medical as well as moral courage to operate in advance of the growth of adhesions, the percentage of mortality in this country would be much reduced.

The paper was discussed by Dr. Sutton, of Pittsburg, who advocated the operation; by Dr. Baker, of Boston, who thought the operation should remain as one of last resort; by Dr. T. A. Emmet, of New York, who believed that it should never be performed for dysmenorrhœa; by Dr. W. T. Lusk, of New York, who fully agreed with Dr. Baker that, when the exploratory incision was made and the ovaries found healthy or with only a few Graafian follicles scattered over their surface, they should be returned and the abdominal wound closed with the acknowledgment that the source of the clinical phenomena had not been found; by Dr. H. P. C. Wilson, of Baltimore, who thought there was great danger of performing the operation too frequently, although there were many cases in which nothing could be done for the patient except to remove the ovaries and tubes; by Dr. Jenks, of Detroit, who thought the operation was limited to a very few cases; by Dr. Reamy, of Cincinnati, who believed that some conservatism should be taught concerning the operation, and the discussion was continued by Dr. M. D. Mann, of Buffalo, Dr. Emmet, Dr. Sutton, Dr. Jenks, and was closed by Dr. Johnson.

The Society then adjourned to meet on Wednesday at 10 A.M.

(To be continued.)

For the Relief of the Burning Pain in Erysipelas of the Face.—Dr. Häcker recommends painting the painful parts with a solution of cocaine, five grains, in rose-water, one-half ounce.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, September 9, 1885.

JOHN A. WYETH, M.D., PRESIDENT, IN THE CHAIR.

HYDATIFORM MOLE.

DR. H. J. BOLDT presented a specimen removed from the uterus of a woman who, according to the statement of the attending physician, had been flowing for ten or twelve days. When Dr. Boldt saw her she was extremely anæmic, with almost imperceptible pulse, and was losing blood profusely. The vaginal tampon had already been employed, but without effect so far as arrest of the hemorrhage was concerned. The uterus was somewhat enlarged, the vaginal portion softened, patulous, and dilatable, but not dilated. Dr. Boldt introduced a sponge tent, and dilated the cervical canal, after which the interior of the uterus was explored and a hydatiform mole, slightly adherent to the fundus and sides, was removed.

The specimen was not of so much interest as the alarming condition of the patient, which necessitated immediate relief in order to save her life. The case illustrated the fact that sometimes it was essential to adopt relief measures promptly without regard to exactness in diagnosis, and leave the positive diagnosis to be determined after the immediate danger had been passed.

MULTIPLE NECROSIS FOLLOWING VACCINATION.

DR. W. P. WATSON presented a patient with the following history: A girl, now five years and nine months old, weighed nine pounds when born, cut her lower incisors when five months of age, and the anterior fontanelle was closed, probably, at about the age of one year. She did not have either any eruption on the skin, or the snuffles, and remained healthy until two years of age. The mother has always had very good health, has not had a miscarriage, and is the mother of six other healthy children, five living, and one died of small-pox. The father died of acquired phthisis, but his parents and relatives were all healthy. The mother's relatives were all healthy. There was no history of either hereditary or constitutional disease on either side.

When two years old the child was vaccinated by the health-inspector, and the mother says that he made two incisions just below the insertion of the deltoid, which bled so freely as to require a little time and some kind of applications to check the hemorrhage. The mother also says that he used two vaccine points; whether animal or humanized Dr. Watson was unable to ascertain positively, but the probability was that it was animal virus.

On the *third* day after the vaccination, the child was sick in bed with fever, and on the *fifth* day the mother noticed on the outer aspect of the left forearm a swelling which was very much inflamed and elevated. One week later a similar swelling, and in about the same situation, appeared upon the right forearm. Two weeks afterward a like swelling appeared over the left scapula, and two months subsequently one upon the outer aspect of the right leg. At the end of a week or ten days those upon the left forearm and over the scapula opened and discharged profusely pus of green color, and the discharge from the other swellings was of the same character when they were opened. The abscesses continued to discharge unhealthy pus for two years, and during the last year several spiculæ of bone have appeared in the sinuses, and have been removed by the mother. The first spicule came from the left forearm and was removed about eight months ago; the last one was removed from the sinus in the right forearm about two months ago. (The specimens were exhibited.) All the sinuses are now closed entirely. The left elbow is anchylosed at an angle of from 20° to 30°; motion seems to be perfect in the right elbow-joint.

The case illustrated the fact that accidents other than the transmission of syphilis might occur after vaccination, and, furthermore, that such accidents were not the fault of either physician or patient.

One point of interest with reference to the abscesses was that they occurred mostly on the same side with the vaccination. Another point of interest was that the axillary glands on the left side never suppurated, although they were enlarged for more than a year.

The child is now in comparatively good health. Dr. Watson asked for opinions concerning the cause of the abscesses; at the same time expressing his doubt as to whether the vaccination had any direct relation to the accidents.

DR. BOLDT asked if it had been determined positively that the child received no injury at the point of vaccination after the inoculation was performed.

DR. WATSON answered that the mother told him that on the third day the point where the vaccine matter was inserted was very much swollen and inflamed, that the child's skin was dark-colored, but there was no eruption, and he could not ascertain that the part had been injured. He further remarked that it was proper to state that the same health inspector, although not a medical man, had vaccinated hundreds of other subjects; but whether similar accidents had ever followed or not he could not say, but it was probable that there had not, as he had not heard of a similar case.

DR. BOLDT said that in the latter part of last May a child was vaccinated, and on the eighth or ninth day, at the point of insertion, a swelling began to develop which increased in size for two days, when he was asked by the mother to see the patient. He then found that the child was suffering from erysipelas, and at that time all violent contact with the vaccinated part was positively denied. The erysipelas soon subsided under treatment, but a swelling soon showed itself at the ankle-joint which soon suppurated, and a sinus was formed that extended from the internal malleolus nearly to the toes, and sufficiently deep to allow him to touch the metatarsal bones with a sound. A few days afterward another swelling developed at a short distance above, and from this one a very large quantity of pus was evacuated. A short time subsequently a swelling came near the knee-joint and extended from a little below the joint to the lower third of the thigh, and into this one a drainage-tube was placed. Some time afterward another abscess formed in the body of the gastrocnemius muscle, and a large quantity of pus was evacuated from it.

Dr. Boldt learned finally that, on the day previous to that on which any special redness was noticed at the point of vaccination, the mother left the child with one of her good friends, who allowed it to play about the yard, and that it fell and hurt itself upon the leg and rubbed the scab off somewhat, although not entirely.

Of course the neighbors thought that the abscesses were due to the vaccination, but it was much more probable that they were due to the injury and the erysipelas.

DR. HEINEMAN thought that vaccination might develop some latent tendency to bone disease, and that the question of coincidence should always be borne in mind in all such cases.

THE PRESIDENT remarked that, with the frequent occurrence of symmetrical necrosis, it was probably nothing more than a coincidence in Dr. Watson's case. It was a fact that in this country, as well as elsewhere, there existed a growing anti-vaccination party, and that it included many medical men. Not long since he was interviewed on the subject by the President of the Society for the Prevention of Cruelty to Children, Mr. Henry Bergh, who is also President of the Anti-vaccination Society. Dr. Wyeth thought that vaccination should be encour-

aged whenever the opportunity presented itself, and that the medical profession should sustain its scientific claims.

Dr. W. M. Carpenter directed attention to a fact in his experience, namely, that the local disturbance following the use of bovine virus had been much severer than that after the use of humanized virus. This might increase its liability to develop latent disease, to which Dr. Heineman had referred.

Dr. Messenger, whose experience in vaccination had been large, had not met with any serious accidents except when there was a strong predisposition to some constitutional disease, as struma, etc. He believed that vaccination should be encouraged, most assuredly.

Dr. Watson thought the point made concerning the severity of the local effect produced by animal virus was a good one, and was one that his observations sustained. He also thought it well to state to the parents or the patients that the results were likely to be more severe than if humanized virus had been used.

Dr. J. Lewis Smith presented a specimen of acute nephritis associated with diarrhœa in an infant. The specimen was referred to the Committee on Microscopy.

Dr. Boldt asked Dr. Smith if he placed any connection between the diarrhœa and the nephritis.

Dr. Smith said it might be that the diarrhœa was conservative, as it was sometimes in Bright's disease occurring in adults.

Dr. Boldt referred to the case of a child thirteen months old with intestinal catarrh, which he thought was due to improper diet. On the day previous to its death complete suppression of urine occurred, and the temperature rose until just before death it was 108.2° F. The autopsy revealed acute nephritis.

Dr. F. Ferguson presented a specimen of

PERFORATING ULCER OF THE DUODENUM—PERITONITIS,

removed from the body of a man forty-five years of age, a native of Poland, and a tailor by occupation. He was admitted into New York Hospital on September 2, 1885. But very little history could be obtained from the man, on account of his condition as well as his inability to speak English. He had been sick with pain in his stomach and constipation for one month.

On admission he was found emaciated; no thoracic lesions, abdomen tender and retracted. He died two days after admission. While in the hospital he vomited several times. His heart action was regular but very weak. His temperature ranged between 100° and 105° F.; his pulse 72 to 82; his urine was negative.

There was an ulcer in the duodenum, triangular on the mucous surface of the intestine, with sides half an inch in length; and on the peritoneal surface circular and one-eighth of an inch in diameter. There was intense peritonitis, with a great deal of lymph in the peritoneal cavity. The mucous membrane of the stomach was normal, as also were the other organs.

Dr. Ferguson also presented a specimen of

ULCERATIVE ENDOCARDITIS,

taken from the body of a boy thirteen years of age, and born in the United States, who was admitted into New York Hospital August 10, 1885.

He gave no family or previous history bearing on his case. Some three years previous to present illness he was laid up for two months with indefinite pains in his leg, but no swelling. Three months previous to admission he had been laid up for two or three days with vomiting, but suffered no pain. For the last year he has been short of breath. In the latter part of June he complained of pain and heaviness in the left chest, and his shortness of breath was more marked. While his pain diminished in severity, his breathing became more labored, and he steadily grew weaker.

On admission he was well nourished, but anæmic. There was slight general anasarca. The sternum is prominent. The jugular veins are also unusually prominent. The cardiac area is increased. The apex beat cannot be felt, and there is a distinct epigastric beat. Over the præcordia there is a to-and-fro friction murmur, and palpation reveals a friction thrill. There is a loud blowing murmur heard in the seventh space in the nipple line, and from this location the first sound of the heart is transmitted to the left, and is more marked on inspiration. In the second space, just to the right of the sternum, is a double murmur, the systolic transmitted upward. The pulse is regular and of fair force. The inspiration is everywhere jerky, and there are numerous friction sounds. The liver and splenic areas are slightly increased.

During the first part of his residence in the hospital his case responded well to stimulants; the œdema, especially of his face, disappeared, and at the end of ten days he was allowed to dress and sit in his chair. This apparent improvement soon gave place to distressing dyspnœa and pain in his abdomen. Toward the last of August and the first few days of September he gradually failed. His anasarca became more marked; his heart action more rapid, irregular, and feeble; and his urine more scanty in quantity.

He died on September 5th, with respiration at 110; pulse varying from 120 to 140 per minute.

The amount of urine passed each twenty-four hours while in the hospital varied from ten to twenty ounces, with a specific gravity varying from 1.018 to 1.028, and at times a mere trace of albumen, while at other times there was considerable amount. His temperature was nearly normal during his residence in the hospital. His pulse varied from 100 to 140; his respiration from 40 to 110 per minute.

The heart is the organ of chief interest. The organ is larger than normal. Its cavities are dilated and walls hypertrophied. The mitral valve is greater in its capacity than normal, the segments of the valve are thickened. There is a shred of vegetation attached to one of the cusps of the aortic valve three-quarters of an inch in length and as large as a crow-quill. Just below the aortic valve there is an opening in the septum, circular in shape and nearly one-half inch in diameter. This opening is through one of the segments of the tricuspid valve. On the auricular surface of this valve there are many shreds of vegetations. There are low vegetations on the cusps of the pulmonary valve.

While this may be a congenital defect in the septum, it is more likely the result of an ulcerative process which had its origin in the left ventricle and destroyed the septum. The septum once defective the right ventricle of the heart became involved and presented similar vegetations to those found in the left ventricle. The liver presented the lesion commonly known as nutmeg, the other organs the lesions commonly seen in cases of heart-diseases of long standing.

Dr. J. Lewis Smith thought that the condition of the heart presented by Dr. Ferguson was congenital. In perforation of the ventricular septum there is commonly a preternatural narrowing of the pulmonary orifice; but such narrowing was absent in this specimen.

The Society then went into executive session.

The next meeting will be held September 23d.

G. Bunge, in the *Zeit. Physiol. Chem.*, describes experiments on the form in which iron exists in egg-yelk. He is led to believe that food does not contain iron in inorganic combinations, but that it only exists in complex organic compounds which have been formed by the vital processes. It is absorbed and assimilated in this form, and then converted into hæmoglobin. This is, he is aware, apparently at variance with the observations of practical physicians. The apparent contradiction may, he thinks, be explained by the hypothesis that inorganic iron salts prevent the decomposition of the organic iron compounds in the intestinal canal.

THE MISSISSIPPI VALLEY MEDICAL SOCIETY.

Eleventh Annual Meeting, Held at Evansville, Ind., on September 8, 9, and 10, 1885.

(Condensed from a Special Report to THE MEDICAL RECORD.)

THE opening session was consumed in listening to the reports of committees and officers.

THE SECRETARY said that, judging from the letters received by him, there seemed to be a misapprehension on the part of members and others as to the nature and objects of the organization. It was not a legislative body, had no constitution and by-laws, and had nothing whatever to do with questions of ethics. He recommended that a sketch of the Society be prepared, setting forth its aims, and published in one of the medical journals.

The first paper was by DR J. E. LUTCLIFF, of Indianapolis, on

PERINEAL SECTION WITHOUT A GUIDE FOR URETHRAL STRICTURE.

The discussion of the paper was chiefly upon the question of the existence or non-existence of impermeable stricture, the majority of the speakers expressing their belief that impassable strictures were sometimes to be met with.

DR. G. B. WALKER, of Evansville, Ind., presented a communication on "Puerperal Fever and Puerperal Septicæmia." He did not favor antiseptic vaginal injections either before or after labor. The general opinion expressed in the ensuing discussion was that there was no real difference between puerperal and surgical septicæmia, and that strict surgical cleanliness was absolutely necessary. The preference among antiseptics was given to bichloride of mercury.

The next paper (see page 342) read was by DR. E. S. MCKEE, of Cincinnati, upon

INTRACRANIAL CEPHALHÆMATOMA.

DR. LOUIS BAUER, of St. Louis, presented a paper upon

THE COCAINE HABIT.

He related the case of a man who used alcohol to excess, to whom was given hydrochlorate of cocaine hypodermatically for the relief of the inordinate thirst from which he suffered. The patient obtained the drug, and began to use it on himself, commencing with one-fifth of a grain and increasing to ten grains, hypodermatically, and he now has the cocaine habit, but has an aversion to alcohol. The speaker thought that, of the two evils, the cocaine habit was to be preferred.

DR. J. H. LETCHER, of Henderson, Ky., then read an article on

CATGUT LIGATURES,

in which he expressed his preference for this kind of ligature. The majority of those who discussed the question, however, were strongly opposed to catgut.

DR. J. C. PEARSON, of Mitchell, Ind., followed with a communication entitled the "Pathological Changes in Dysentery."

After this the

PRESIDENT'S ADDRESS

was delivered by DR. F. W. BEARD, of Vincennes, Ind. The speaker sketched briefly the history of medicine in Indiana, dwelling especially upon that of Vincennes, an old French post, about which there were many points of interest. He then gave an account of the formation and growth of the Mississippi Valley Medical Society.

Short addresses were also made by Drs. Porter, Letcher, Eastman, and Burton, the speakers insisting upon the necessity of more work being done, and calling upon the members to exert themselves and to prepare interesting and original papers for presentation to the Society.

The scientific labors of the meeting were then resumed by Dr. A. C. BERNAYS, of St. Louis, who read a paper on

CHOLECYSTOTOMY.

The speaker reported a case, exhibiting specimens of the gall-stones removed, and described his method of operating.

DR. L. D. BROSE reported a case of "Fracture of the Skull" in a young child. The patient had now grown up to boyhood, and was presented to the members. A considerable portion of one parietal bone, where the fracture had occurred, was missing. This led to some discussion upon trephining of the skull, and the indications for its performance.

DR. EDWARD BORCK, of St. Louis, then read a paper (see page 344) entitled

REMARKS ON ABDOMINAL SURGERY, WITH CASES.

The general opinion of those who discussed the paper was in favor of an early operation.

DR. WM. BYRD, of Quincy, Ill., presented a communication on "Tetanus," in which he recommended treatment by Fowler's solution in doses of twenty drops every two hours.

Other papers were then read by Dr. G. V. Wallen, of Indianapolis, on "Nasal Stenosis;" by Dr. Wm. Porter, of St. Louis, on "Some Errors in Physical Diagnosis;" by Dr. A. Dixon, of Henderson, Ky., on "Progress in Medicine," and by Dr. A. Sawyer, of Hillsboro, Ill., on "The Relation of Mind to Matter."

The following officers were elected:

President—Dr. A. Dixon, of Henderson, Ky.

First Vice-President—Dr. G. W. Burton, of Mitchell, Ind.

Second Vice-President—Dr. T. D. Washburn, of Hillsboro, Ill.

Third Vice-President—Dr. Wm. Cheatham, of Louisville, Ky.

Secretary—Dr. H. J. B. Wright, of Olney, Ill.

The Society was then adjourned to meet in Quincy, Ill., on the second Tuesday in July, 1886.

THE SURGICAL SOCIETY OF PARIS.

Stated Meeting, June 3, 1885.

M. HORTELOUP, PRESIDENT, IN THE CHAIR.

(Special Report for THE MEDICAL RECORD.)

M. GILLETTE reported a number of cases of

INTESTINAL OBSTRUCTION FROM BILIARY CALCULI.

One case in particular was that of a woman, sixty years of age, having a right femoral hernia, who presented, however, all the symptoms of an internal strangulation of the intestines. After three days, during which an expectant plan of treatment was followed, the patient obtained relief by the expulsion from the rectum of about twenty-five biliary calculi. In referring to a similar case, reported at the preceding meeting of the Society by M. Cruveilhier, the speaker regretted that laparotomy had not been performed, as he thought the patient's life might thereby have been saved.

M. CRUVEILHIER replied that his case was one of

OBSTRUCTION FROM A SINGLE LARGE CALCULUS.

The patient was seen by three hospital surgeons, but none of them was able to make a positive diagnosis. A simple laparotomy would not have sufficed, as the gall-bladder was found, at the autopsy, to contain a large stone, whose presence had excited inflammation and would have soon led to rupture.

M. Farabœuf then read a paper on certain peculiarities in the

ANATOMY OF THE SCAPULO-HUMERAL ARTICULATION,

and the surgical deductions to be drawn therefrom. The speaker referred particularly to the anterior and superior ligaments, and to the mechanism of subtricipital luxations. The anterior ligaments, leaving out of consideration the capsular and the subscapular tendon, were chiefly two, which might be designated, in respect to their points of origin and insertion, as the supraglenoprehumeral and the pregleno-subhumeral. These ligaments may be readily seen when the articulation is opened from behind. Their bony attachments are so strong that, when strained, they may cause a fracture of the neck of the scapula. This fracture may be produced in the cadaver by a violent blow on the shoulder from behind forward, while the humerus is in a position of outward rotation. The reduction of

SUBCORACOID DISLOCATION,

after Kocher's method, is explained by the fact that outward rotation of the arm, after it has been approximated to the chest, causes a relaxation of the posterior ligaments which have been put upon the stretch by the anterior displacement of the head of the humerus. In

SUBTRICIPITAL LUXATION

the head of the bone escapes under the circumflex nerve and passes beneath the tricipital tendon.

M. Verneuil related a case of

ENCHONDROMA OF THE UPPER JAW.

The specimen was interesting from the fact that the tumor enclosed a small central sequestrum.

M. Polaillon then presented a report upon a communication of M. Féré, of Meaux, entitled

THE NATURE AND ETIOLOGY OF URETHRAL FEVER.

The author believed that the febrile attacks following operations upon the urinary organs were, in the majority of instances at least, merely relapses of intermittent fever excited by traumatism. He cited several cases in which operations of circumcision, internal urethrotomy, and even simple catheterization, practised upon individuals who had previously had malarial fever, were followed by chills recurring sometimes for several days at regular intervals. These attacks were controlled by quinine. Another patient, in poor general condition, but free from any malarial poisoning, had no chill or elevation of temperature after internal urethrotomy. The reporter agreed fully with the writer of the paper as regards the nature of so-called urinary fever.

M. Marc Sée maintained that urethral fever was a distinct affection, and that she cases cited by M. Féré were exceptional.

M. Verneuil had several times remarked upon the difficulty of diagnosis between a relapse of intermittent fever and true urinary fever. In the latter case, however, the urine frequently contained pus; there was pain over the kidneys, and there was less regularity in the intermissions than in malarial fever. It was not a matter of supreme importance, however, to make a diagnosis in every case, since both conditions were readily controlled by quinine.

M. Féré presented another communication upon the

SUBSTITUTION OF FUNCTION OF THE MEDIAN NERVE BY THE ULNAR.

The case was one of injury to the elbow, leading to destruction of a portion of the median nerve. Sensation and motion were in time restored to the parts supplied by this nerve. But while electrization of the median nerve caused no contraction, that of the ulnar was followed by movements of the muscles normally supplied by the median.

M. Berthand exhibited a patient upon whom M. Le Dentu had performed

NEPHRECTOMY

two months previously. The operation was for the removal of a large calculus. The wound had closed firmly, without any fistula.

M. Lagrange reported a case of

THYROIDECTOMY.

The patient was a woman, twenty-two years of age. The operation was performed after Julliard's method. In order to prevent the retention of the discharge in the retrosternal pouch, the operator secured the aponeurotic attachment of the tumor to the lower part of the incision in such a way as to facilitate the flowing away of the fluid. The patient had entirely recovered at the end of three weeks.

The Society then adjourned.

Correspondence.

OUR LONDON LETTER.

(From our Special Correspondent.)

THE NEW PHARMACOPŒIA—ITS MERITS AND DEMERITS—AND THE CHANGES THEREIN—PREPARATIONS MADE TO CORRESPOND WITH THOSE IN THE UNITED STATES PHARMACOPŒIA.

London, September 4, 1885.

The new edition of the British Pharmacopœia has appeared within the last few days. The alterations and additions are, as expected, very numerous. The omissions are less noteworthy and are only twenty-two in number. Among the articles omitted are iodide of cadmuim, iodide of iron (*not* its syrup, which still remains), enema tabace (though tobacco itself remains), magnetic oxide of iron and the moist peroxide, green iodide of mercury, liquor atropiæ (liq. atrop. sulph. remains and is consequently to be henceforth used always instead of the other), and acetate of soda. The list of omissions might have been extended with advantage. The medical student of the future will think so at any rate, seeing how numerous the additions are. Arnica, chirata, cusparia, elemi, galbanum, hemidesmus, laricis cortex, lobelia, mezereon, mori succus, pyrethrum, sambuci flores, and many others of little therapeutic value and infrequent employment, retain their place. Extract and tincture of conium remain, though most physicians now use the succus.

The additions are too numerous to enumerate. They number one hundred and fourteen. Amongst them are of course boric, chromic, hydrobromic, and salicylic acids; coca, its hydrochlorate, and lamellæ of the same; several new salts of soda, or sodium, as we are now to term them; ergotine; jaborandi and its alkaloid; a liquor ferri acetatis (two strengths of this) and a liquor ferri dialysatus, the latter being considerably stripped of its glory, as we are informed that "this solution of dialysed iron, so called, is a solution of highly basic ferric oxychloride or chloroxide of iron, from which most of the acidulous matter has been removed by dialysis." Menthol, thymol, eucalyptus, iodoform, nitro-glycerine (in the form of chocolate tablets termed *tabellæ*), oleates, sulphocarbolate of sodium, salicine, gelsemium, apomorphine, and lodeina are all in their respective places, and there are useful preparations of many of them. We also welcome chrysarobinum (Goa powder), oleic acid, cascara sagrada, paraffinum, durum et molle, caffeina, aloin, morphinæ sulphas, and liquor sodii ethylatis. Most of us, I think, will feel very doubtful as to the advantage of adding meconic acid, iodide of arsenic, frangula bark, calx sulphurata (sulphide of calcium), and some others. As to the last named preparation I fancy few therapeutists outside the school of Ringer have much faith in its value to check suppuration.

We look in vain for picrotoxine, bisulphate of quinine (soluble sulphate), sodium nitrite, kaolin (as an excipient), pancreatin, or any new salts of lithium. It is some consolation to find the physical characters of lithium citrate now correctly given for the first time. It is no longer erroneously described as amorphous and deliquescent. For this and other pharmaceutical emendations we have doubtless to thank the distinguished pharmacists who have taken part in the preparation of this edition. More careful directions are given for making many of the preparations, and the strength of many of the Galenical ones is regulated by passing the solid ingredients through sieves having meshes of specified degrees of fineness varying in different cases.

The nomenclature has in many instances undergone revision. Thus, we no longer read sodæ carbonas, but sodii carbonas, and so throughout. The affix of the alkaloids is now made *-ina* uniformly, *e.g.*, quinina. This may be all right, but vapor coninæ reads rather oddly. arnicæ radix is now arnicæ rhizoma; similarly with several others, rhizome has replaced radix. Physostigmatis semea is a doubtful improvement on physostigmatis faba. Why not semina? We find colchica semina. Spelling has not escaped the attention of the editors. Assafœtida drops one s, and ecbalium doubles its l.

The strength of many preparations has been altered—mostly in the direction of increase. Among those which have their strength increased are liquor iodi, liquor arsenicalis, tincturæ quininæ, and injectio morphinæ hypodermica. The first three of these are increased in strength about eleven per cent.—the dose remaining unaltered. The morphina solution is increased *twenty per cent.;* the minimum dose remains one minim, the maximum being placed at five instead of six minims. Oleum phosphoratum is increased in strength *thirty-three per cent.*, the maximum dose being unaltered, while the minimum dose advances from three to five minims. The alterations in the last two preparations are likely to lead to inconvenience, and, in that of the morphina solution, also danger. It is to be regretted that the strength of aqua lauro-cerasi and infusum digitalis, respectively, should not have been reduced so as to make the doses the same as those of the other waters and infusions. Their dosage remains exceptional, as before. So does the strength and dosage of the following tinctures: Tr. cantharidis, tr. capsici, tr. cannabis indica. The maximum dose which may be given of tr. camph. co. is still placed at a drachm, which is also the maximum limit assigned to vinum antimoniale, though when used as an emetic, the latter may be given in larger doses. Under vinum ipecacuanhæ the ordinary and the emetic doses are both stated. I am sorry to see the same is done under sulphate of copper, an emetic which is discountenanced by most toxicologists on account of its poisonous properties if it is retained and emesis not produced. Lastly, it is what a schoolboy would call "a burning shame" that the dose of tinctura aconiti should continue to be officially stated as "five to fifteen minims." Every third-year's student knows better than this—nay, most first-year's men do.

Some of the alterations I have mentioned, although likely to be inconvenient for a time, have, however, one great claim to favorable notice, viz., that thereby some of the preparations are made to correspond in strength with similar ones in the United States Pharmacopœia. It is to be regretted that more has not been done in this direction, especially as the projected International Pharmacopœia is still in the clouds. The United States Pharmacopœia is, too, one which should have especial claims upon British physicians, being that of a nation speaking the same language and having many laws and customs in common—a nation, in fact, belonging to the same Anglo-Saxon race equally with ourselves.

The new terminology of the alkaloids corresponds with that in the United States Pharmacopœia. So does the designation of soda-salts, as sodii sulphas, etc. The latter alteration also has chemical usage to commend it to us. Tinctura quininæ now corresponds exactly with that of the United States Pharmacopœia both in strength and composition, being now made with the hydrochlorate of quinine instead of with the sulphate. Oleum phosphoratum is now made of the same strength as the United States preparation, and liquor arsenicalis is made to approximate very closely in composition to its American representative. Liquor iodi now contains the same amount of iodine—five per cent.—as the United States solution, but a different proportion of iodide of potassium. I may remark, in passing, that several of the preparations now contain so much "per cent." of the chief ingredients instead of, as before, an odd amount. One preparation (pulvis glycyrrhizæ compositus) is now made to conform in composition to that of its fellow in the Prussian Pharmacopœia.

OUR PARIS LETTER.

(From our Special Correspondent.)

THE CHOLERA QUESTION—TRANSPLANTATION OF EYE—DEATH OF DR. LUNIER.

PARIS, September 11, 1885.

As cholera is naturally occupying the attention of the public, both in and out of the profession, I shall lay before your readers a discussion that took place at the annual meeting of the Association Française for the Advancement of Sciences, at which Dr. Bouchard questioned the correctness of the principles emitted by Professor Koch respecting the etiology of the disease. The following is a summary of Dr. Bouchard's communication: 1. According to Professor Koch cholera is an infectious malady of which the comma-bacillus is the pathogenic agent. 2. The intestinal cavity is the exclusive habitat of this bacillus. 3. This bacillus does not penetrate into the blood nor into the lymph, and as it does not enter the tissues, it cannot produce the general accidents of cholera by means of intoxication; the presumption therefore is that it secretes in the intestinal cavity a virulent substance which, absorbed at the surface of the intestine, determines the poisoning of the entire organism. Dr. Bouchard gives the results of his experiments which he had performed with iodoform, naphthaline, to destroy the comma bacillus of cholera and the micro-organisms of typhoid fever, of which the following are the conclusions: 1. Analogy leads one to think that cholera is an infectious malady, resulting from a microbe. 2. The pathogenic microbe, whatever it may be, produces or incites the human organism to produce a morbid poison ("poison-cholérique"). 3. To this special intoxication is soon added another intoxication by a normal poison ("poison-urénique"). 4. The pathogenic agent of cholera cannot occupy exclusively the intestinal cavity. 6. The comma-bacillus is not the productive agent of the choleraic poison.

In looking over these conclusions it will be admitted that neither one nor the other of these distinguished physicians has thrown much light on the etiology or nature of the disease, except that they both agree that it is due to a microbe; but, what the microbe is or what part it plays in the pathology of cholera, is as obscure as ever.

In my letter, which was published in THE RECORD of July 4th, I gave an account of the transplantation of the eye of a rabbit to replace the eye of a young girl, which had been removed to prevent sympathetic inflammation of the other. Dr. Chibret, of Clermont-Ferrand, who operated, promised further details of the case to the Paris Academy of Medicine, but I have not seen that he has done so. I find, however, some interesting observations on the case in the *Revue Générale d' Ophthalmologie*, in which the writer questioned the propriety of the operation, remarking that to transplant an organ is not an

operation impossible, but to make the transplanted organ live; that is, to place it in a condition that it may contract vascular and nervous connections with the cruentous tissues to which it was adapted, is quite another question, that is, whether the transplanted organ will ever be in a condition to perform the physiological functions required of it. As far as the eye is concerned, Dr. Chibret has precisely resolved the question in the negative. The writer further states that on the fifteenth day of Dr. Chibret's operation, the cornea was completely destroyed.

This result, however, does not discourage the operator, who attributed this destruction to the pressure of the thread used for the sutures and to the thinness of the cornea of the rabbit's eye, and Dr. Chibret is hopeful that he will yet succeed, not only in getting the transplanted eye to live in its new position, but to re-establish the function of vision in this transplanted eye. Dr. Fano, commenting on this subject in his *Journal d'Oculistique*, makes the following sensible remarks: "We shall remind those who may be tempted to perform this operation, that the introduction into the eye of an organic mass destined to undergo mortification in a very short time, will expose the patient to the risks of putrid infection."

Dr. Lunier, the well-known Alienist, died on the 5th inst., from an attack of pneumonia which he contracted a few days before, while out shooting. Dr. Lunier was sixty-three years of age. He took his degree in 1849, and after having been physician to lunatic asylums in the Provinces, he was appointed, in 1864, Inspector-General of the Lunatic Asylums and Prisons throughout the country. He was a member of the Academy of Medicine, and officer of the Legion of Honor. He edited the "Annales Medico-Psychologiques," and was the author of several works on mental pathology, among the most important of which may be cited: "Studies on Mental Maladies," "On the Progressive Increase in the Number of Lunatics," "The Part Played by Alcoholic Drinks in the Increase in the Number of Cases of Insanity and Suicide."

He was the founder of the French Temperance Society, in which cause he took a very active part. I may here mention that the members of the French Temperance Society are not pledged as they are in England and America. Dr. Lunier did not approve of the oath, as he considered that if a person required such a measure to keep him from drinking, his self-restraint could not be worth much. He never approved of teetotalism, as he thought that from the exhaustion caused by the exigencies of a civilized life, some stimulant would be more or less daily required, whether in the form of wine or anything else. At the temperance meetings he always endeavored to impress on his hearers that it was not the moderate use of wine that should be contemned, but its abuse. Dr. Lunier's death, in this cause at least, will be a great loss, and he will be universally regretted in and out of the profession.

The remains of Dr. Thuillier, member of the French Cholera commission to Egypt, where he fell a victim to the disease in 1883, have been brought to France at the expense of the State, and on arriving at Marseilles they were immediately conveyed to Amiens for interment. On the day of the funeral the public monument raised to the memory of the lamented deceased, will be officially inaugurated.

MALARIAL ALBUMINURIA.

To the Editor of The Medical Record.

Sir: By the very title of my paper on "Some of the more Uncommon Symptoms and Complications of Malaria," printed in The Medical Record of September 12th, Dr. Nelson will see that I do not wish to put forward as novel what is simply unusual, but have endeavored to add my share to interesting clinical material.

Dr. Thompson's paper on "Temporary Albuminuria caused by Malaria," which, I am very sorry to say, escaped my notice, does not cover the ground as to renal disease in malaria, for temporary albuminuria is not equivalent to nephritis.

With reference to the cases of bronchial trouble, which I designated "Apneumatosis" in malarial subjects, my explanation is based on mechanical principles, readily understood, and perhaps more satisfactory than Dr. Nelson's internal determination.

Respectfully yours,

L. Weber, M.D.

25 West Forty-Sixth Street.

"A MEDICAL VIEW OF ARMY MORALS."

To the Editor of The Medical Record.

Sir: If not taking up too much space in your columns, I should like to add something to my article of July 11th on the above subject.

I was stimulated to write the article named, not alone by the extract from *Col. Med. Journ.*, but also from the fact that carelessness among army surgeons, either in field or hospital, gave to not a few soldiers of the Rebellion a "syphilitic record," when they were entitled to no such honor. While the medical department was composed largely of men of ability, many regiments enlisted in 1863–64 were provided with very inferior men as surgeons. Especially is this true of Western regiments. To the incompetency of the latter are due many of the mistakes in diagnosis. Place a soldier in the hospital with any form of eruption of the skin, and he was in danger of acquiring a syphilitic record. Even "itch" has been so characterized; gonorrhœa and syphilis were notoriously confounded.

There are soldiers debarred from pensions by this same "hospital record," in whom we can find no evidence of "constitutional syphilis," and whose history points out the fact that gonorrhœa was the disease, if a venereal disease occurred. "Private A—— contracts gonorrhœa at L., August, 1862. Is in hospital for treatment. Has iritis in March, 1865. Discharged, April, 1865. Vision destroyed, August, 1866. Applies for pension, and is debarred by record, the inference being 'syphilitic iritis.'" "Give a dog a bad name," etc.

Medicus says it were "better to divest such questions of sentiment." So do I, but sometimes sentiment and fact are hard to separate. The error begun in the army is still continued. Physicians make certificates of treatment for syphilis, who, if upon the witness-stand, could produce very little evidence of having treated anything of the kind.

The word "specific" is used, as the word malaria or the one-time "sick liver," simply as a cloak to cover our ignorance. In the case above, an iritis following after an attack of syphilis is presumptively "specific." But it requires something more than sharpened teeth in children to show that the parents ate grapes; and other evidence than iritis is necessary to show its syphilitic origin. Neither should we jump at another conclusion and say "gonorrhœal ophthalmia."

In my article referred to, reference was had simply to "soldiers of the rebellion," not to soldiers of other countries, nor to soldiers of America other than the ones specified. The chances for syphilitic infection among our soldiers "on the plains," taken in connection with the comparatively few now in the army, should not be taken as evidence in the question at all, the opportunities for the gratification of the sexual appetite being much greater in the latter than in the former.

Medicus includes my "five presumptive cases" with the one positive case. That would be called presumption in a mild degree, on his part. In none of the five cases mentioned was the evidence stronger than in "Private A——," and in three of the cases the evidence was altogether subjective.

Taking the statistics as given by Medicus, "twelve soldiers per thousand," who will say that any physician

is warranted in applying the word "specific" to *all* scrofulous children "whose fathers had been in the army?" Apply it in the same ratio to the children of the clergy!

As to the moral responsibility, there is no difference in the fact that one soldier had gonorrhœa and another syphilis. But it is a very important point to decide, when confronted with diseases of the lungs, throat, skin, eyes, and spinal cord, etc., in soldiers who have obtained a "syphilitic record." G. T. M.

THE DUTY OF THE CONSULTING TO THE ATTENDING PHYSICIAN.

To the Editor of The Medical Record.

Sir: A recent experience impresses me with the necessity of opening a discussion that may lead to the correction of an evil connected with consultations, fortunately not very frequent, yet common enough to demand attention.

A case happening some time ago, and the recent one alluded to above as occurring lately, will illustrate one point of the subject.

In the first case I am free to say there was a careless blunder on my part. It was a patient on whom the chills of laryngeal phthisis were mistaken for those of malarial fever. The throat symptoms led to my requesting the services of another physician to make a laryngoscopic examination. The result was the discovery of the tell-tale ulceration. I did now what I should have done before—went over my case carefully and found plain enough evidence of the disease. The consulting physician, who, with my consent, was to attend to the treatment of the throat, evidently took no especial pains to excuse my error of diagnosis. At any rate he was retained, and I left.

The recent affair is quite different, for no fault can be found with me in this case.

A primipara, after a long first stage of labor, had fairly entered on the second stage. About twenty-four hours had elapsed from the start, and during the last twelve hours the excitement of the friends, with which we are all so familiar in cases of tedious labor, had reached such a height that my efforts to suppress it were unavailing, and I was requested to call some one in consultation, notwithstanding my assurance that it was unnecessary. Previously I had made arrangements with a near-by physician to hold himself in readiness to assist me when required; had provided myself with chloroform, and made complete arrangements to apply the forceps if they were indicated.

Still, it was insisted upon that some prominent obstetrician should be summoned. My evil genius, I suppose, brought the name of one who enjoys a good reputation, and a messenger dispatched to him soon procured his attendance. I explained to him that the case was one of ordinary tedious labor, and that I had asked him in only to allay the apprehensions of the family as to the safety of the patient. As the pains, in the meanwhile, had become weaker, and I had myself concluded it would be permissible to apply the forceps, the doctor's offer to use the instruments was accepted by me and the woman was delivered, but with a perineal tear nearly to the sphincter. I had met with a similar misfortune myself in several cases lately, and for this reason had delayed instrumental interference as long as possible.

Although my services were continued until convalescence of the patient, when my bill was sent in I was informed that I "had allowed Mrs. —— to suffer for three days, when the case was put in another physician's hands, who saved the life of the mother and child."

I afterward learned that the consulting physician, when spoken to by the family in reference to my supposed mismanagement, made a show of defending me, but it seems that he "damned me with faint praise" so effectually that I found myself dismissed, and him in my place prescribing for the patient.

In the phthisis case there is but little doubt that the influence of the doctor exerted in my favor would have retained me in the family.

The questions are: Was it his duty to have used his influence in this way? Should he have retained the case, coming into his possession in the way it did?

As regards the other case, no one will deny that I was treated—to use the mildest term—unfairly. If the *truth* had been properly stated to the family by the doctor, it would have prevented all the unpleasant after-consequences.

These cases are samples of what every physician in general practice occasionally meets. One doctor in this city, often called in consultation, has a habit of remarking to the friends, that "if he had been called before there might be a chance," and this habit, I know, very seriously curtails his consultation practice.

What remedy have we? I suggest that we pass around the names of such offenders. If they do not care for honor, perhaps they may for money. Justice.

New Instruments.

A NEW DEPARTURE IN CIRCUMCISION.

By J. W. ROSS, M.D.,

Surgeon U. S. Navy.

Circumcision, as I have seen it and taken part in it during the past sixteen years, whether performed with or without clamps, etc., has seemed to me altogether too formidable for an operation of its size, requiring a general anæsthetic, tedious, slippery, bloody, inexact, inelegant. Wishing to do away with some, at least, of these opprobria and relegate circumcision to the insignificance it deserves, thereby leading to its much more frequent performance, I have devised the little instrument figured below.

It is a light, flat ring of hard rubber, with two ridges upon its outer surface, the posterior one, *b*, continuous, the anterior one, *a*, interrupted or notched. It is to encircle the penis in the *cul-de-sac* under the prepuce, the latter being drawn forward over the instrument and compressed against it, in the groove between the two ridges, by a small cord wound round its integumentary surface. The foreskin is then to be severed just in front of the anterior or notched ridge by a circular sweep of the knife, the angle formed by the ridge and the horizontal surface serving as a director. The notches in the anterior ridge are to facilitate introduction of the sutures.

The instrument has recently been used upon a patient of Dr. Sidney A. Fox, Surgeon of the Brooklyn Elevated Railway, and proved highly satisfactory to both patient and surgeon. From this operation and some experiments, the following details and suggestions are thought valuable:

Anæsthetize the parts as thoroughly as possible with cocaine solution, push the ring over the glans and place it so that the posterior ridge, *b*, be well behind the corona glandis, and the anterior ridge, *a*, almost directly over it. It is advisable that the ring be of such a size as to require some little force in order to pull the glans into it. There is no danger of strangulation as the instrument is too broad to slip entirely behind the glans. The cut represents the exact size of the one used, which will answer for almost any adult penis, the prepuce being generally very dilatable and the glans compressible. When phimosis exists, the edge of the prepuce may be nicked at non-vascular points sufficiently to allow the subsequent steps of the operation. It is better not to use any lubricant, as it is unnecessary and makes the organ and in-

strument difficult to manage. Get all the tissue you wish to remove in front of the anterior ridge and then winding a small, soft, strong, inelastic cord pretty tightly twice around the foreskin directly upon the groove between the two ridges, tie its ends upon the dorsum with a double surgeon's knot. A piece of loosely-twisted, ordinary white cotton wrapping-twine, about the size of a D violin string, was used by us and found to answer perfectly.

It proved unnecessary to draw the cord as tightly as had been intended. There being no tension upon the prepuce, it has no disposition to retract, and the cord need only be tight enough to prevent hemorrhage. Should it be too tight, it might lead to subsequent sloughing. Should it be desired to make the operation absolutely painless, local anæsthesia of the skin at the proposed line of incision may be produced with ether or rhigalene spray. Circular excision of the prepuce immediately anterior to the notched ridge should be made with a very sharp knife or razor, dividing skin and mucous membrane down to the hard rubber at one sweep. While this is being done the operator should hold the penis in his left hand, the posterior portion of the instrument between the left thumb and forefinger, while the patient, or some other assistant, makes slight traction upon the free edge of the prepuce. The tough movable tissues are disposed to roll away from the knife.

Apply cocaine freely to the cut edges and introduce plenty of fine sutures with a small curved needle entered at the bottom of the notch upon the mucous surface and brought out on the surface of the skin. The introduction of each suture was considerably expedited by picking up the edge of the mucous membrane with a slender pair of toothed-forceps. After the sutures are all tied, the constricting cord may be tentatively relaxed, to be retightened upon appearance of any hemorrhage. In the case operated upon, although the prepuce was abnormally vascular, and the instrument removed very soon after tying the sutures, the hemorrhage was practically nil then and afterward. This was due to the compression, the astringency of the cocaine, non-separation of the cut mucous and integumentary edges, number of sutures, non-division of the frænum and its artery, and the fact that all the vessels were cut at an equal distance from the free edge of the foreskin. It is obvious that, with the instrument under consideration, it would be impossible to divide the frænum, as this is pushed out of the way of the knife entirely.

If, at the proper stage of the operation, it be deemed advisable to tie or twist any of the divided vessels, the instrument would greatly facilitate doing so by the support and control it furnishes. The instrument was not removed from its original position until the completion of the operation. Should there be danger of hemorrhage, it might be left *in situ* almost indefinitely after the cord is removed. I would advise against much haste in removing the sutures. They had better be left in for three or four days lest separation take place during the troublesome erections, which occur so commonly after circumcision. After the operation a cold one per cent. solution of carbolic acid was kept applied to the penis on lint.

A few weeks after the operation, except for a delicate red streak at the line of incision, the penis looked as though it had never sported a prepuce, as though the circumcision had been congenital. There were no angles, tags, flaps, or lumps (as are almost invariably found after circumcisions where the prepuce has been dragged forward and divided in front of the glans), because the skin and mucous membrane, while in their natural relative position, had been divided evenly and circularly along the line of the corona glandis, and had never been allowed to separate. Leaving the operator out of the question, such a consummation is very gratifying to the patient. The average man is not quite, but almost as solicitous about the appearance of his penis as about that of his nose.

Professor Otis saw our patient a month after the operation, and made a very complimentary memorandum of the appearance of the penis as well as a sketch of the circumcision ring.

Two of these instruments, one for adults, the other for children, would probably be all that the general surgeon would require. For exceptional cases special-sized ones could be procured, as Messrs. Tiemann & Co. propose to make them quite inexpensive.

Dr. Fox's record of the case referred to above.—"May 22, 1885, circumcised a patient with redundant prepuce, using instrument devised by Surgeon J. W. Ross, U. S. Navy.

"No general anæsthetic was used, but a four-per cent. solution of cocaine hydrochlorate was applied to the prepuce and glans. There was slight pain upon dividing the skin, but none in the mucous membrane, or during the introduction of the sutures. The patient sat up in a chair throughout the operation, and rendered valuable assistance. There was virtually no hemorrhage, only a few drops of blood escaping upon loosening the compressing cord. No ligature, torsion, or styptic, was used or required during or after the operation. The sutures were removed in exactly forty-eight hours after the operation, the patient having been scarcely confined to his bed, and union was perfect, having taken place by first intention. After experience and observation in this operation while House Surgeon in Charity Hospital, New York, and in private practice since, I would point out the following advantages of Ross' operation over all others with which I am acquainted: Its ease, neatness, bloodlessness, requiring no general anæsthetic, ligature, or styptic; no necessity for any assistant except the patient; speedy union, and perfect result.

"Sidney A. Fox, M.D.

"410 Vanderbilt Avenue, Brooklyn, N. Y."

Army and Navy News.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from September 13, 1885, *to September* 19, 1885.

Campbell, John, Colonel and Surgeon. Retired from active service, September 16, 1885. S. O. 212, A. G. O., September 16, 1885.

Official List of Changes in the Medical Corps of the United States Navy for the week ending September 19, 1885.

Murray, J. M., Passed Assistant Surgeon. Resignation accepted, to take effect January 1, 1886.

Ross, J. W., Surgeon. To special duty at New York.

Eruption from Antipyrine.—Dr. J. Henry Fruitnight, of this city, writes: "In the report of the proceedings of the Practitioners' Society of New York, which appeared in the issue of The Medical Record dated September 5, 1885, Dr. A. A. Smith is stated to have asked the members present whether they had observed cutaneous eruptions after the administration of antipyrine. Dr. Ball responded in the affirmative. It is my desire to add my testimony corroborating the observations of Dr. Smith. It is my impression that I was among the very first in this city to make use of this drug. The results of my observations upon the action of the remedy were communicated by me to the members of the Northwestern Medical and Surgical Society of this city at the meeting held October 15, 1884. I quote from that Society's book of records as follows: 'Antipyrine was administered to two patients afflicted with acute phthisis. In one case a fine papular, itchy eruption showed itself, similar to that which sometimes appears in persons taking quinine, and which disappeared when the medicine was discontinued. In both cases perspiration was very profuse, just as Dr. Smith had observed in his cases.'"

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Original Articles.

ADDRESS TO THE NEW YORK ACADEMY OF MEDICINE.[1]

BY A. JACOBI, M.D.,

PRESIDENT OF THE ACADEMY.

FELLOWS OF THE NEW YORK ACADEMY OF MEDICINE: It is a source of intense gratification to me to greet you this evening in the beginning of a new season of co-operative work, after a long vacation. May the labor of the coming months be successful, both for ourselves and for the medical world. *Ars longa, vita brevis.* Art is so extensive, indeed, and life so short, that we have to concentrate all our efforts to accomplish a certain amount of result.

In behalf of our common interests I crave your attention, first, for a few facts which I consider of great importance in regard to medical progress. They are connected with the session of the International Congress held in Copenhagen, from August 10 to 16, 1884. In a general meeting held on August 14th, upon propositions made by Sir James Paget, of London, Professor Ewald, of Berlin, Professor Bouchard, of Paris, and Dr. Billings, of Washington, the following resolution was passed: That an International Committee be formed for the Collective Investigation of Disease, in connection with the work of the International Congress, and that a certain number of gentlemen do represent their respective countries thereon. The gentlemen designated for that purpose were Trier and C. Lange, of Copenhagen; E. Bull, of Christiania; Rauchfuss, of St. Petersburg; Ewald and Bernhardt, of Berlin; Schnitzler, of Vienna; Pribram, of Prague; Koranyi, of Buda-Pesth; D'Espine, of Geneva; Bouchard, of Paris; Lepine, of Lyon, Sir William Gull and Mahomed, of London; Humphry, of Cambridge; Sir Joseph Fayrer, for British India; Gutierrez-Ponce, for South America; N. S. Davis, of Chicago; A. Jacobi, of New York; and Isambard Owen, Secretary-General, of London. The only changes which have since taken place in the list of membership have been brought about by the untimely death of Dr. Mahomed, and the addition of Axel Key, of Stockholm, and Runeberg, of Dorpat.

According to a circular distributed by the Secretary-General some time ago, the main objects which the Committee seeks to attain through the Collective Investigation of Disease are to widen the basis of medical science, to gather and store the mass of information that at present goes to waste, to verify or correct existing opinions, to discover laws where now only irregularity is perceived, to amplify our knowledge of rare affections, and to ascertain such points as the geographical distribution of diseases and their modifications in different districts. It will be its endeavor to place clearly before the whole profession the limits and defects of existing knowledge, as well as to stimulate observation, and to give it a definite direction. It will be a not unimportant incidental result of its work should it tend, as is hoped, to the better training of the members of the profession in habits of scientific and practical observation, and in systematic methods of recording the facts which they observe.

The age in which we live has seen enormous advances in the sciences on which the fabric of medicine rests, such as chemistry and other branches of physics, physiology, and pathology. Each of these has taken giant strides. It must be admitted, however, that purely medical knowledge has scarcely made proportionate progress. It cannot be expected that it should do so, as it deals with the aberrations of the most complex of organisms, is of all sciences the most difficult, and demands the greatest patience and the largest accumulation of data.

Hitherto the advancement of medical science has been brought about mainly by individual effort. The value of such work in the past we in no way underrate, nor do we desire to lessen the amount of it in the future; but in medical science there is much that defies interpretation from individual experience, and many problems so far-reaching in an ever-widening field, with elements so manifold, that no single man, however gifted and long-lived, can hope to bring the whole within his range. The need, therefore, in medicine, of that combination and concentration of individual work which is adopted in many other branches of science and in commerce, and to which increasing facilities of inter-communication have given so much impulse and so much strength, cannot be questioned. Indeed, it may be said that, resting on individual research alone, medical knowledge can be advanced but slowly and with difficulty. Future progress to any great extent must be the work, not of units acting disconnectedly, but of the collected force of many acting as one. For many to act as one, organization is needed; that organization it is the purpose of our committee to supply.

Disease is many-sided; and we wish to include in our organization those who see it from every side. All, therefore, whether hospital physicians, family and school attendants, specialists, medical officers of the Army and Navy, and of workhouses and asylums, will be asked to contribute their quota of observations to the common fund."

These are both the motives and the propositions of the committee appointed at Copenhagen. In regard to them, and collective investigation in general, the favorable opinion of the profession has been expressed frequently. But now and then a voice is still heard disparaging its utility, and discouraging the collection of facts on a large scale for the reason that the procedure has not yet been demonstrated to be useful. Indeed it has not, for it has never been tried to a large extent. We shall hardly insist, however, that the ground stone must not be laid, because the tower is not yet on the edifice; that the seed must not be sown, because the fruit cannot be harvested to-day, or was not gathered yesterday.

Hesitation has also been expressed from another point of view: one of our foremost medical journals (the *Boston Medical and Surgical Journal*, of September 4, 1884) makes the remark that those who labor only for personal renown will not enter enthusiastically into the work proposed by the committee. But its demands are very trifling indeed, the questions to be settled by the observations of large numbers are but few, and of such a nature as not to expropriate those who are able and anxious to arrive at, and be credited with, scientific results of their own and benefit by the reputation attached to them.

If the remark above-quoted were founded on reality, whoever worked for personal reputation only, would not even participate in the discussion of a scientific society for fear that his remarks, coupled with the essay of somebody else, would miss the opportunity of being listened

[1] Delivered Thursday, October 1, 1885.

to as the main topic of an evening's conversation. Now, on the contrary, we are in the daily habit of seeing experience published, and ingenuity displayed in just such discussions. Nor do I believe that as another journal has it (the *New York Medical Journal*, September 4, 1884), that "the answers coming from a great body of men of diverse views would constitute but a catalogue of raw impressions," and that "when the facts to be observed are of a nature to call for exquisite discrimination on the part of the observers, to multiply the number of the observers, is to depreciate the general quality of the work." For the more uncertain the correctness of observations is apt to be, the more numerous they ought to become. Single observations have settled a fact but very rarely. The very existence of large societies proves the instinctive demand for variety and comparative appreciation of observations. Is not every physiological fact known to us as the outgrowth of a number of experiments of many men? And pathological knowledge the result of a great many autopsies by different men in many countries? What is individual experience but the accumulation of a multitude of facts of a similar nature by one man? What is science but the result of accumulated experience, collected and compared of many men, countries, and ages? Are a hundred meteorological stations more efficient, or less so, than none would be? I do not belong to that class who believe a problem easy of solution merely because its solution is anxiously sought for, nor do I deny difficulties because they are obstacles to the accomplishment of cherished ends, but I know that we are in a better position to serve the co-operative work of all countries now that steam and telegraph have reduced distances, mail and travel have multiplied intercourse, and we are to-day as near St. Petersburg as our ancestors were, a hundred years ago, to Lake Erie or the James River.

Thus it appears evident that the difficulties are not excessive. As to the usefulness of collective investigation the opinions will become all but unanimous. The efforts of the British Medical Association, and the Medical Society of Berlin, and the fair success of an attempt at solving a problem connected with the etiology of croupous pneumonia, made in the Medical Society of the County of New York, during the last year, are sufficiently promising for the collective investigations of the future. In their interest it is that I propose to make a further communication, and request your co-operation.

The Central Committee on Collective Investigation of the International Congress has selected the following subjects, viz.: Rickets, Chorea, Acute Rheumatism, and Cancer, planned a number of simple questions in regard to them, mainly to their etiology, and expects as simple answers. Being the Secretary of the American Sub-committee, I have gathered all of them in pamphlet form, added a few introductory general remarks, supplied by the Central Committee, and present herewith a specimen for your inspection. Those of you—I hope all of you—and those of the profession at large who will learn of this request, are respectfully asked to interest themselves and their friends in behalf of the undertaking, notify me of their desire to be furnished with a copy, and comply with the suggestions of the Committee contained therein. We do not look for immediate achievements. For the complex of sciences and arts called medicine has required thousands of years to arrive at its present condition; the aggregation of many wills and forces has resulted in a slow evolution only. No single discovery even, nor the first attempts at collective investigation, will effect a revolution in medicine. But what we do hope to accomplish is the gathering of facts on the strength of an improved method, the confirmation of old, and the acquisition of new knowledge, and thus to contribute to the success of at least this one Committee. It need not matter how much may have, nay, has been done, to mar the success of the next International Assembly, and to deprive us of the opportunity long looked forward to of greeting the giants of science, the celebrated teachers, the ingenious experimenters, and our literary or personal friends of Europe, on our own soil. For an International Congress will never convene under the roof of a house divided in itself, though the division may be the work of a few sacrilegious hands only.

But this is a sad theme, known to everybody here, deplored by everybody who feels as both a personal grief and a public calamity the humiliation which is involved in the hesitation on the part of the Congress to assemble in our country.

It is in profound sorrow that I pass by the subject; I prefer to speak of another topic, which, while it is not directly connected with any of the aims and immediate purposes of this Academy, concerns us as professional men of the State of New York and the Union. I allude to the almost unexpected success on the part of the profession of the State of New York in harmonizing a large majority of the medical men of the United States.

Let me explain. Chapter II., Art. IV., Sec. 1, of the Code of Ethics of the American Medical Association, reads as follows: "A regular medical education furnishes the only presumptive evidence of professional abilities and acquirements, and ought to be the only acknowledged right of an individual to the exercise and honors of his profession. Nevertheless, as in consultations, the good of the patient is the sole object in view, and this is often dependent on personal confidence, no intelligent regular practitioner, who has a license to practise from some medical board of known and acknowledged responsibility recognized by their association, and who is in good moral and professional standing in the place in which he resides, should be fastidiously excluded from fellowship, or his aid refused in consultations when it is requested by the patient. But no one can be considered as a regular practitioner, or a fit associate in consultation, whose practice is based on an exclusive dogma, to the rejection of the accumulated experience of the profession, and of the aids actually furnished by anatomy, physiology, pathology, and organic chemistry."

This paragraph has so often been criticised by both friends and adversaries that it is unnecessary to refer again to its contradictions, its "nevertheless" and "but," and to its implied acknowledgment of modern "homœopathy." For let us not forget that the Code of Ethics of the American Medical Association saw the light forty years ago, and that what they call "homœopathy" now-a-days differs from Hahnemannism of those times in everything but the name. They now claim that their practice is not based on an exclusive dogma; they claim to teach, in their schools, and do teach, anatomy, physiology, pathology, and organic chemistry, and thus come up to the requirements of the above article of the Code of Ethics of the American Medical Association. Indeed, if there were no better grounds for their rejection they would to-day be entitled to membership in the Association.

What the Medical Society of the State of New York, in its sessions of 1882 and 1883, adopted in its stead ("Trans. of the Med. Soc. of the State of New York for the Year 1882," p. 75), in a code of medical ethics which covers two pages instead of the eighteen pages of the Code of Medical Ethics of the American Medical Association ("Proceedings of the National Medical Conventions, held in New York, May, 1846, and in Philadelphia, May, 1847," pp. 91–106. Philadelphia, 1846), reads as follows:

"Members of the Medical Society of the State of New York, and of the Medical Societies in affiliation therewith, may meet in consultation legally qualified practitioners of medicine. Emergencies may occur in which all restrictions should, in the judgment of the practitioner, yield to the demands of humanity."

Compare with these brief sentences the explanatory declaration of the American Medical Association, passed

unanimously in its session at New Orleans, of April, 1885. There and then it was

"*Resolved*, That clause first of Art. IV., in the National Code of Medical Ethics, is not to be interpreted as excluding from professional fellowship, on the ground of differences in doctrine or belief, those who, in other respects, are entitled to be members of the regular medical profession. Neither is there any other article or clause of the said Code of Ethics that interferes with the exercise of the most perfect liberty of individual opinion and practice.

Resolved, That it constitutes a voluntary disconnection or withdrawal from the medical profession proper, to assume a name indicating to the public a sectarian or exclusive system of practice, or to belong to an association or party antagonistic to the general medical profession.

Resolved, That there is no provision in the National Code of Medical Ethics in any wise inconsistent with the broadest dictates of humanity, and that the article of the code which relates to consultations cannot be correctly interpreted as interdicting, under any circumstances, the rendering of professional services whenever there is pressing or immediate need of them. On the contrary, to meet the emergencies caused by disease or accident, and to give a helping hand to the distressed without unnecessary delay, is a duty fully enjoined on every member of the profession, both by the letter and the spirit of the entire Code.

But no such emergencies or circumstances can make it necessary or proper to enter into formal professional consultations with those who have voluntarily disconnected themselves from the regular medical profession, in the manner indicated by the preceding resolution.

After these resolutions had been passed in New Orleans, many of the professional men who always persisted in adhering to the code of the American Medical Association, were of the honest opinion that they had, by accepting them, removed every discrepancy of opinion or difference of action on the part of those adhering to either the old or new code. For it is true that the explanatory declaration of Chap. II., Art. IV., Sec. I., exhibits a great resemblance to the New York Code of 1882. For the Medical Society of the State of New York it must be a source of intense gratification to be convinced, by the passing of that declaration, that a few years have sufficed to so change public opinion as to oblige even the American Medical Association to recognize the justness of most of the New York proceedings. Upon this result the New York State Society can but be sincerely congratulated, and the spirit of equity and justice, as displayed by the Committee drafting the explanatory declaration, must be commended.

The expressions of opinion in regard to the wholesome effect of the New Orleans declaration have been very numerous. I am in possession of several letters containing remarks full of satisfaction and hope. A gentleman well and deservedly known in the profession of both hemispheres, and markedly so with us for his allegiance to the code of ethics of the American Medical Association, gave enthusiastic expression to his delight over the satisfaction that declaration must give, and to the hope that the New York Academy of Medicine would give a public utterance in that direction. That would "immediately settle all difficulty about the code, and at once restore peace and harmony in the profession." I had to tell him that the Academy excluded all politics, ethical or otherwise, from its discussions, and that the only societies who could act in the matter were the medical societies of the County and of the State of New York. There the matter then rested, for I believe I was right in excluding it from any consideration in our midst.

Still, while this Academy is no political body, old and new codes, as far as I know being equally represented with us, we are an integral part of the body medical, and the events in the professional world affect our interests and sympathies intensely. Thus we have to regret that the wording of the resolutions of New Orleans is very apt to obscure their meaning. Emergencies are acknowledged to be binding, but while the New York code admits that a physician may (not shall, or must) consult with a legal practitioner in a case of emergency, the explanatory declaration of the Association insists that such a meeting is not a meeting in the usual meaning of the term, and such a consultation "no formal professional consultation."

The differences are rather slight, it is true. If in spite of that the code question is still made a war-cry by some, that fast reminds us of the bloody wars and persecutions directed against former friends because of nominal differences of ecclesiastical opinions in the history of the Church. It is also explained by the intense enmity exhibited under all circumstances by those who have been convinced against their will. In a few instances we have to deal with the zeal displayed by converts, who, after they had greeted the birth of the new code with congratulations, were induced by certain external circumstances to change what they call their minds within the period elapsing between the appearance of two monthly numbers; or—what is still more, shall I say surprising, shall I say sad—there are those who fought the new code because they longed for a fight without caring on what account. A gentleman who edited a sprightly and rattling journal at that memorable time, and voted "the regular ticket," and was by no means gentle toward the new-code men and principles, has convinced and assured me he never read the new code. I believe him. There are others again—their number has been large at all times—whose souls and sensibilities are moved by shibboleths, by single words, provided these words are skilfully handled by shrewd calculation.

> "Just where fails the comprehension
> A word steps promptly in as deputy.
> With words 'tis excellent disputing;
> Systems to words 'tis easy suiting;
> On words 'tis excellent believing;
> No word can ever lose a jot from thieving."
> (Bayard Taylor's "Faust.")

This is the element which in skilful hands determines for a moment the result of meetings, caucuses, assemblies. It is the emotional element, which is swayed by sentiment both false and true, by gesticulating oratory, and by implicit temporary confidence in the veracity and sound motives of its presumed leaders; which, therefore, "takes the specialists of the new-code persuasion by the tops of their heads and cuts their throats," but after all is cooled down by common sense, consciousness, and conscientiousness when left to itself. Such men are in the majority. They are the waves of the ocean, always changing, now smooth and smiling, then turbulent and raving; and still always the same, steady in their general effects; now and then a disturbance, and an injury, but always the eternal source of healthful development. We never cease to bless the ocean even when it is doing its temporary worst. Let us, therefore, not despair of the future peaceful and blissful development of the country or the profession in times of turbulent commotion.

What difference is left unabolished, may be left to itself until acrimony is soothed, and bitterness replaced by kindness. Greater discrepancies than these have been wiped out. When the actions of men will be weighed, their opinions in regard to dogmatic utterances will be disregarded. When deeds are counted, let creeds be tolerated. But let us have patience, all of us; great improvements in the universal conscience do not take place by hard fighting and refuting. Lecky is right when he says that the greatest errors cannot be annihilated; it takes time for them to fade out.

In the face of the explanatory declaration passed in New Orleans, which in its main aspects, I take it, endorses the New York State Society and the spirit of the new code, the majority of those present in the meeting of the American Medical Association were guided into

believing that they must protect a sacred code from infidel invaders. The main complaint was that new-code men had been given offices in the organizations of the International Congress. On p. 101 of the *Journal of the American Medical Association*, you will find the following complaint: "Directly upon the threshold of the most important part of their work a majority of the original committee practically ignored all allegiance to the Medical Association, and assuming an entirely independent attitude, at once placed in the front of their ranks . . . one who was well known to have repudiated the National Code of Ethics." And in a voluminous circular addressed to the State and County Medical Societies, composed almost exclusively of editorials of the *Journal of the American Medical Association*, and signed by the permanent Secretary of the Association and four other gentlemen, the following language is used: "The editorials of the Journal of the Association present the case" (the differences in regard to the proposed organization of the International Congress) "so clearly that there can be no doubt of the duty of the friends of the Association, or of the animus of its enemies. We feel assured that your society will indorse the action of the association, and stand firm in support of the Code of Ethics."

It is, however, fairly understood by this time that the war of the codes is over. In fact it has always appeared to unsophisticated people that the fighting about the code was not reciprocal at all; for, when the New York State Society had settled its code question to its satisfaction and that of the country societies in affiliation therewith, it appears that in them and by them, the subject was not mentioned again except on strong provocation. You remember that it took a great deal of emphasis to relieve even this Academy of the proffered dispute. The code question is dying a great deal more easily than the bloody shirt disappeared from the politics of the country. If it is puffed up as the pivot of the organization of the International Congress, everybody is perfectly aware that this is either a pretext or a grave mistake. I believe it is both. Europeans who were not afraid of admitting laymen and homœopathists, expected to meet, if ever they would consent to cross the Atlantic for an International Congress, the American medical profession. No International Congress must be caught in domestic quarrels, or audaciously kidnapped by a society, or a party, or the faculty of a medical school.

We are presenting a sad spectacle. In our first attempt at welcoming the medical world to our shores we have failed. The humiliation connected with this fact we have to submit to; to trace it to all its causes I cannot undertake here. The least we can do is to admit it; if the task we hoped to accomplish was too much for us, let us try to prepare for the future by attending to those duties of our own which we can perform without hinderance or disturbance.

The affairs of the Academy will require our undivided attention. In many respects we have been very successful indeed. The hall and building in which we meet is practically our own and free of debt. Thus we can look forward again to improve our quarters, enlarge our facilities, and think of securing, in some near future, a fire-proof building for our ever-increasing bibliographical treasures. Our income has increased with our membership. Both, however, require additions. There are many desirable men in the profession whom we ought to carry on our lists for mutual advantage.

The hopes I expressed in my inaugural address a few months ago have begun to be fulfilled. Old sections have been revived, new ones have been formed. I may here assure the gentlemen who have undertaken the task of organizing them, that whatever aid the president and council can give them in their labors, will be freely offered. The sections will not only contribute to the improvement of their own members, but will enhance the interest of the general sessions by the communications coming to them from the sections and the discussions emanating therefrom.

To enable them to begin their work, Article VI. of the constitution had to be altered. That change has been brought about in the manner prescribed by law some months ago. It has also appeared to many fellows that more alterations are required; they have given notice of their desire in this respect, but have been unwilling to come before the Academy with any propositions to make radical changes, though in the manner prescribed by law. Now both the constitution and by-laws may be repealed or amended by a three-fourths vote at a stated meeting, provided notice of the same has been given in writing at a previous stated meeting. But it will prove more satisfactory to guard against any mistake by trusting the work of moving proposals to change our by-laws in the hands of a committee carefully selected for that purpose. Off-hand legislation is always dangerous; it often errs, and always weakens the conservative tendencies which must underlie any political, scientific, or social structure, if it be expected to last. The president expresses the hope that if such a committee be appointed, it will be slow in considering and quick in reporting.

If I be at liberty to state a wish of my own, I should say that one of the articles which require amending is that which refers to the Committee on Medical Ethics. This committee is almost powerless; it has no initiative whatsoever; in every case calling for interference or judgment it has to wait for a charge to be preferred by a fellow; the odium of an accusation falls always on an individual member, whose unselfish interest in the welfare of the Academy or the profession is at once published, as it were, by arraying him personally against the accused. To prefer a charge is thus almost rendered an impossibility. Thus, indeed, our law is more apt to encourage derelictions of ethical duties than to prevent or punish them. Now, I am of the opinion that the interest of an accused member must always be taken into account, but that of the Academy is at least of equal importance. What the District Attorney and the police are in the political and social commonwealth, the Committee on Ethics ought to be in our midst. It ought to be both authorized and directed not to wait for personal charges, but itself watch over the moral welfare of our community. If such an authority be established, the ethically weak would know that he is observed and may be held responsible without a fellow being compelled to draw upon himself odium or revenge.

No society, either political or other, can ever do without a penal code—old or new—thus there is no harm in admitting that the Academy is in need of a Committee of Ethics like any other society. If the number of those who necessitate its existence or interference be but small, so much the better; but the few when not stopped, act as bacilli of moral putrefaction. Human kind is so organized that disease germs will operate rapidly and persistently. A committee on ethics, endowed with the authority to warn and censure in time, without any procrastination, will strengthen the feeble when he feels the first symptoms of struggling against temptation, may frighten the man of harder fibre, who would otherwise rely on his facilities and the difficulties on the part of the committee, and protect the interests of society and the endangered dignity of the profession.

That I speak of no imaginary evil we all know too well. What I said a few months ago of the growing tendency of a few to make the public acquainted with their merits and accomplishments through the columns of the secular press was considered timely, and met with the appreciation of many members of the profession, both old and young, here and elsewhere. I mean to deserve the respect of my peers and superiors in the profession by again directing your attention to the fact that the penny-a-liners of the daily press are being utilized in the interest of, and by, weak-kneed brothers who cannot stand on their own legs, who mistake cheap notoriety for

reputation, and the grin of derision for the smile of approval. The more power is concentrated in commerce, the greater the prevalent which is conquered by trade, the more rampant the spirit of grasping egotism, which is pathognomonic of modern industrial pursuits, the more is it the domain of the liberal professions to approximate their aims to an ideal. Let us not forget that learning by heart the action of medicines, or the working of articulations, or the proper use of an instrument does not exhaust the possibilities of a medical man. The physician requires all that, but beyond that all the characteristics of a man of principle and intellectual and moral culture. Neither can be inculcated by the demands of old or new codes. Still, as a corporation and a profession, we are responsible for the existence of these qualities in our members. It is true we cannot supply ideals to order, nor can we make those whose eyes seek the mire raise their brow to the skies. But such as find it difficult to develop those qualities spontaneously must be taught and aided in acquiring them.

As far as I am concerned, I hope there will be no occasion again to refer to the same subject during my term of service. If there be, I shall repeat my warning. For I take it for granted that when you elected me to the highest office in your possession, you did so both in the belief that your candidate would have opinions and principles of his own, and on the condition that he should do his full duty.

SUCCESSFUL CASES OF PULMONARY PHTHISIS.

By W. H. GEDDINGS, M.D.,

AIKEN, S. C.

Previous to the last two or three decades of the present century pulmonary consumption was almost universally regarded as an incurable malady, and the physician esteemed himself fortunate if he succeeded in ameliorating the condition of its unfortunate victims or in warding off for a short time its apparently inevitably fatal termination.

It was not until the occasional discovery of cicatrices and of calcareous masses in the lungs of persons who had died of other diseases, and in whose organs there were no evidences of any recent deposit of tubercle, that the medical world began to believe in the curability of pulmonary phthisis.

The chief reason for this general scepticism was the inability of the physicians of that time to recognize the disease sufficiently early to admit of treatment with any prospect of success. It is true that Auenbrugger published his great work, "Inventum novum ex percussione thoracis humani, ut signo, abtrusos interni pectoris morbus detegendi," as early as 1761, but it was coldly received, and met with no general acceptation until 1808, when Corvisart translated it into French, and through his high position in the medical world at once secured for its almost forgotten author the somewhat tardy recognition of the great discovery he had made some fifty years before. Eleven years later (1819) Laennec completed the good work begun by Auenbrugger, by publishing his immortal treatise on auscultation. Although greeted with the greatest enthusiasm, many years elapsed before these methods of diagnosis became the common property of the profession, and it has been only within the last fifteen or twenty years that a more thorough system of medical education has placed them to some extent within the reach of the average practitioner.

Instead of waiting, as was formerly the case, for extreme emaciation, exhausting sweats, and profuse expectoration to tell the tale, the modern physician now detects with comparative ease the earliest symptoms of the dreaded disease, and takes measures to stay its progress before it reaches a stage when the best directed treatment will avail but little.

To convey conviction to those who still doubt that phthisis is amenable to treatment, and to encourage those who have been unfortunate in their attempts to master the disease, I publish the following successful cases, selected from a large number that have come under my observation during the last ten years. Some of them are included in my report of cases of phthisis treated at Aiken, S. C., and published in The Medical Record of 1879, 1880, and 1882; but most of them are of more recent date.

Case I. *Hemorrhage, infiltration of right lung; complete recovery.*—A middle-aged clergyman, from Gloucester, Mass., a patient of Dr. Morrill Wyman, of Cambridge. Disease commenced with bronchial catarrh in April, 1878. Has had one slight hemorrhage.

February 1, 1879.—The upper portion of the thorax, on the right side, is much depressed. There is an extensive area of dulness occupying nearly the whole front of the right lung. There is also dulness behind, but not so extensive as in front.

March 7th.—Much improved; cough less, but the expectoration continues profuse. Has a good color; and has gained eight pounds.

March 13th.—Patient looks fresh and ruddy; pulse and temperature all but normal. Expectoration still profuse.

April 9th.—Pulse, 84; temperature, 98¼°. Cough much less, and the expectoration is reduced to a fourth of what it was a month ago.

April 26th.—Pulse, 84; temperature, 99°. Has continued to improve; has gained four pounds since last examination.

May 20th.—Had an attack of diarrhœa a week ago which caused him to lose six pounds, three of which he subsequently regained. He now weighs nine pounds more than he did when he arrived in Aiken. There is diminished resonance, not amounting to positive dulness, extending from the clavicle to the third rib; over which region the respiration is normal, the expiration being barely audible. He coughs little except in the morning, at which time he expectorates two or three drachms of muco-purulent matter. I saw this case again in 1881. He had enjoyed good health since May, 1879, but, being of a very nervous disposition, refused to allow me to examine him. At present (1885) he is still free from pulmonary disease.

Case II. *Pertussis, followed by infiltration of right lung; improvement, relapse, and subsequent recovery.*—A bright little girl of six or seven years, Portsmouth, N. H., who, being under the care of a homœopathic practitioner, consulted me only occasionally, so that her case-history is more or less imperfect. The disease was the result of an attack of pertussis.

November 6, 1878.—Pulse, 120; temperature, 99½°. The right lung is infiltrated from the apex to the fourth rib, as evidenced by distinct dulness both in front and behind.[1] The patient did remarkably well until February 1st, when she had an attack of bronchial catarrh. She recovered readily from this, and continued to improve until late in the spring, when she returned home. She spent the summer at North Conway, N. H., and returned to Aiken in 1879. She had had no relapse, and enjoyed good health throughout the winter. She continued quite well until the fall of 1883, when she was attacked with acute pneumonia at her home in Portsmouth, N. H. This was followed by a return of the old symptoms, for the relief of which her mother consulted another physician. Feeling dissatisfied with the progress of the case she called me in again in March, 1883. She was pale, sallow, and emaciated, and although now ten years old, weighed only fifty-six and three-fourth pounds. Her pulse was 104; temperature, 102.5°; appetite bad, digestion poor, with troublesome cough and profuse night-sweats. Physical examination revealed absolute dulness

[1] The symptoms afforded by auscultation were accidentally omitted.

from the right clavicle to fourth rib, with diminished resonance below. Posteriorly the dulness reached to one inch below the spine of the scapula. Respiration on that side bronchial, with prolonged experium and increased vocal resonance.

April, 1885.—Patient has had no relapse since 1883, looks well, and only coughs when she has an acute attack of bronchial catarrh. Pulse and temperature have been normal for over a year. There is marked depression of the diseased side, over which there is still more or less dulness.

CASE III. *Profuse hemorrhage, disease of right lung; complete recovery.* — A middle-aged mulatto, one of my own patients, first presented himself about fifteen years ago. He was having quite a profuse hemorrhage from the lungs. The attacks of hæmoptysis continued to recur at longer or shorter intervals. A physical examination afterward revealed dulness and other signs of infiltration of the right lung. The patient, believing that his hemorrhages were due to malarial poisoning, made repeated applications for life insurance, but was invariably rejected. There has been no return of the bleeding since 1874; the cough has ceased, and the patient's general appearance is that of a person in good health. The only physical signs remaining at this date (June 1, 1884) are slight dulness under the right clavicle and first rib, with some feebleness of the respiratory murmur. The patient's trade is that of a tailor, a fact worthy of note in a case in which recovery has taken place; that occupation being justly regarded as decidedly conducive to the development of pulmonary phthisis. So extensive is its prevalence in Vienna among that class of workmen that it is sometimes designated as "the disease of the tailors." This patient has enjoyed perfect health ever since, and is now as fat as a seal.

CASE IV. *Hæmoptysis, night-sweats, infiltration of left apex; complete recovery.*—Male, forty-one years of age. Patient of Dr. Van Bibber, of Baltimore. Hereditary predisposition to consumption on the father's side. Disease began with bronchial catarrh in the autumn of 1877. Has had several attacks of blood-spitting, and suffers with occasional night-sweats. The patient has been some time in Aiken, and is in much better condition than when he arrived, having gained at least five pounds.

April 4, 1878.—The patient has continued to improve, having gained three additional pounds during the past month, making a total increase of eight pounds since his arrival in Aiken. There has been no return of the bleeding.

April 6th.—His appearance is that of a perfectly healthy man. He coughs occasionally throughout the day, and expectorates about half an ounce, mostly mucus.

Patient has been two months in Aiken, and during that time has gained ten pounds. Pulse and temperature normal. The only physical symptom of the old disease is diminished resonance under the clavicle. This patient may be regarded as nearly well. He has had no relapse since 1878, enjoys perfect health, and has resumed his business in Baltimore.

CASE V. *Infiltration of left lung; complete recovery.* —A young girl, fifteen years of age, from Cincinnati (Drs. Carson and Richards). Disease commenced with cough on March 7th.

April 17, 1878.—Pulse, 96; temperature, 101°. Left side dull in front, from the clavicle to second or third rib; respiration feeble and indistinct in character. On the right side the respiration is louder, with audible expiratory murmur.

April 24th.—Improving; coughs very little, and then only in the morning.

July 8th.—Pulse, 88; temperature, 98¾°. Cough has disappeared entirely, and the patient presents all the appearances of a person in perfect health. Notwithstanding her having several sharp attacks of diarrhœa, her weight has increased from 135 to 145½ pounds. This young lady has remained quite well, and up to 1883, when last heard from, was in the enjoyment of perfect health.

CASE VI. *Disease of right lung, improvement, relapse, and subsequent recovery.*—Male, forty years of age, from Worcester, Mass.; patient of Dr. Calvin Ellis, of Boston, and Dr. Thomas Gage, of Worcester. Began with bronchial catarrh in January, 1879. Has gained three pounds since his arrival in Aiken, thirteen days ago.

April 22, 1879.—Color good; if anything, too florid. Expectorates one ounce of muco-purulent matter; pulse, 108; temperature, 101¼°. Dull on the right side, from the clavicle to the second rib in front, and as low as the angle of the scapula behind.

April 30th.—Continues to improve, coughs less, and the expectoration is somewhat reduced in quantity.

May 18th.—Patient does not look so well, and there are indications that the disease is extending.

May 22d.—Color bad, apparently losing ground very rapidly. Area of dulness extends in front to the lower border of the third rib. Has an obstinate diarrhœa, resisting for a long time all the usual remedies. This was eventually checked and the patient went back to his home in Vermont, where he slowly improved. Returned to Aiken the following winter.

November 12, 1880.—Pulse, 80; temperature, 99°; weight, 137½ pounds. Coughs three or four times in twenty-four hours, raising each time a small quantity of muco-purulent matter. Dull on the right side from above clavicle to the upper border of third rib, and between the scapula and vertebral column, the respiration being bronchial in character.

December 10th.—Has continued to improve. Pulse and temperature are normal, and his weight has increased to 140½ pounds, a gain of three pounds since October 12th. Cough has ceased almost entirely, a little hack after breakfast being all that is left of it.

January 10, 1881.—Improvement has continued without interruption; has not missed a meal since his arrival in Aiken; has attained his full average weight, and presents the appearance of a person in perfect health.

Right side: The dulness in front extends now only to the lower border of the first rib; posteriorly it remains unchanged. Respiration slightly bronchial.

April 24th.—Notwithstanding several weeks' confinement to the house with an old gunshot wound, the patient has continued to improve. The little hack in the morning, noted at the last examination, has disappeared, and for six weeks there has been no cough of any description. Pulse and temperature remain normal. There has been no further change in the physical symptoms, except diminution of the area of dulness behind, which is now confined to the space above the spine of the scapula, and between that portion of the bone and the column.

The above is the most remarkable case of arrest of phthisis that has ever come under my observation. At one time, in the spring of 1879, he was so pale, and the temperature so persistently high, that a fatal termination appeared to be inevitable. He has remained perfectly well ever since, and is now established in business in Tennessee. Has since been accepted by an insurance society.

CASE VII. *Infiltration of left lung, night-sweats, emaciation; recovery.*—A young man, twenty-four years of age, from Burlington, N. J., a patient of Dr. Grant. Does not know whether there is any hereditary predisposition to consumption in his family. He began to cough in July, 1879, and shortly afterward had a slight hemorrhage, which, in its turn, was succeeded by night-sweats and loss of flesh. He has lost in all twenty pounds, his present weight being 120 pounds.

October 20, 1879.—Color pale; pulse, 112; temper-

ature, 100.2°. Expectoration muco-purulent in character and small in quantity.

Left side: There is dulness in front, from the clavicle to the heart, and behind, from the upper border of the scapula to its lower angle. The respiration over the front is bronchial in character, with prolonged experium; posteriorly the respiratory murmur is indistinct.

Right side normal, except that the respiration over the apex is harsh, with prolonged experium.

November 3d.—Pulse, 108; temperature, 100.2°. Looks much better, is stronger, has gained five pounds in two weeks, and the sweats have ceased entirely.

November 20th.—Pulse, 100; temperature, 99.5°. Weight 130 pounds, a gain of ten pounds during the month.

December 8th.—Pulse, 98; temperature, 99°. Has continued to improve, looks well, and coughs but little. Weighs 132½ pounds, a gain of twelve and a half pounds.

January 10th.—Pulse, 96; temperature, 99°. Looks fresh and ruddy, and has the appearance of a person in good health. His present weight is 136 pounds, a gain of sixteen pounds since his arrival in Aiken. Coughs only once in three days, on which occasions he expectorates only a little pellet of mucus.

March 8th.—Color rosy; never coughs except after some unusual exertion, such as a fit of laughter. The area of dulness in front has become more resonant, especially below the clavicle and near the sternum. The dulness now does not extend lower than the third rib. Behind, the dulness reaches from the spine of the scapula to its lower third, the region above the spine and the lower third having become resonant. The respiration is no longer distinctly bronchial, but rather undecided in its character.

This case was lost sight of after his return home, and I am therefore unable to state whether the results obtained were permanent.

Case VIII. *Infiltration of right lung; no return of symptoms for fifteen years.*—H. B——, colored, female, about fifty years of age. This patient consulted me in 1870, on account of persistent cough and loss of flesh, accompanied with slight fever. Physical examination revealed consolidation of the upper third of the right lung. She gradually regained flesh and strength, the cough disappeared, and with it the other symptoms of pulmonary disease. She has remained well ever since, and has been able to resume her usual work.

December 31, 1879.—Ten years have elapsed since her first examination; there has been no return of cough or of any other symptom of lung disease; the pulse is somewhat accelerated (92), but there is corresponding rise of temperature. The only trace of the disease present is an area of dulness on the right side, extending from above the clavicle to the upper border of the second rib. She has had no threat of the return of the old disease, and, although well advanced in years, is able to do a full day's work as a washerwoman.

At the present date, 1885, the patient is in the enjoyment of perfect health.

Case IX. *Infiltration of right lung, hemorrhage, fever, night-sweats, emaciation, etc.; complete recovery.*—Male, twenty-five years of age; from Malden, Mass.; patient of Dr. Bemiss, of Medford, Mass. Heredity on the maternal side, mother and two brothers having died of phthisis. The disease began with a slight attack of hæmoptysis in May, 1878. This was followed with loss of flesh and night-sweats. Had another hemorrhage in April, 1879, much more profuse than the first, and then began to cough. Went to Minnesota, where he for a time ceased to cough. Over-exerted himself, brought on profuse hemorrhages and a return of his cough. The hemorrhages continuing to recur, he started for Aiken.

January 1, 1880.—Pulse, 100; temperature, 100°; weight, 126 pounds; color good.

Right side: Dull from the clavicle to the second rib, with diminished resonance under the third. Respiration bronchial, with jerking expiration. Behind, the dulness extends over the upper two-thirds of the scapula.

There is no dulness on the left side, but the respiration is very harsh. Moist râles over both lungs. Expectorates one-half ounce, some of which sinks. Can now lie on both sides, which he was unable to do during the summer. Prognosis favorable. Patient improved steadily, the temperature sank to 99.5°, and he gained two pounds in weight; the cough became much less troublesome, and the expectoration ceased altogether. During the month of March an abscess formed near the anus, and developed into an exceedingly troublesome and very painful fistula. This prevented any further increase in weight, but seemed to benefit the local symptoms in the lung; the cough ceasing entirely after the opening of the abscess. At the time of his departure he was suffering too much to submit to an examination, but I afterward met him at Bethlehem, and found him quite well. There had been no return of the cough, and his general appearance was that of a healthy man. Physical examination showed a reduction in the size of the infiltration; the dulness extending in front from below the clavicle to the second rib, while, behind, the only evidence of disease is diminished resonance between the upper portion of the scapula and the vertebral column. The fistula had been operated upon, and was gradually healing. At last accounts (1883) this patient had resumed business in Massachusetts, and was perfectly well, being able to remain at his post as bookkeeper in Boston, even during the winter months.

Case X. *Consolidation of apices of both lungs, emaciation, night-sweats; complete recovery.*—Male, aged twenty-five years of age, from Belleville, Ontario (Dr. M. Sullivan). Disease began in November, 1879, with bronchial catarrh; had night-sweats, and lost fifteen pounds.

January 31, 1880.—Pulse, 102; temperature, 102°; weight, 150 pounds. Was quite ill during the journey south, and had to stop at Baltimore. Color pale. Expectorates about one ounce of muco-purulent matter. Tongue coated; cannot retain food. Right side dull in front, from above clavicle to the fourth rib, with bronchial breathing.[1]

April 12th.—Patient improved steadily after the second week of stay in Aiken, and now looks quite robust; has a fresh, ruddy color, and now weighs 165 pounds, a gain of fifteen pounds since his arrival. Pulse, 80; temperature, 98.5°. Coughs only after a hearty laugh or some other unusual exertion. The dulness on the right side is reduced to a limited area above the clavicle, with diminished resonance under that bone. Behind there is diminished resonance over a small space between the scapula and spinal column. Respiration in front is vesicular, behind bronchial, over a very small area. On the left side the dulness has disappeared entirely, and the respiration is everywhere vesicular.

Result: Complete arrest of the disease, with a gain of fifteen pounds, and entire disappearance of all physical signs of disease in one lung, and partial clearing of the other. When last heard from this patient was living in Canada, and had had no return of the disease.

Case XI. *Infiltration of right lung, hemorrhage; arrest, with cessation of all symptoms of disease except slight dulness on percussion.*—Male, twenty-eight years of age (Dr. George H. Humphreys, New York). Had hemorrhages at long intervals during the summer of 1879, with cough and night-sweats. Lost eight pounds.

February 10, 1880.—Color pale. Expectoration small in quantity, and muco-purulent in character. There is dulness on the right side above, under, and below the clavicle in front, and between the scapula and vertebral column behind. In addition to this there is a limited area of dulness in the axillary line. Respiratory murmur is feeble.

March 10th.—Pulse, 76; temperature, 99.5°. Much

[1] Physical signs on the back were accidentally omitted.

improved, color good. Coughs only in the evening, and without expectorating. Has gained two pounds. There is no change in the physical signs, but over the back and side there is no trace of the dulness observed at the first examination.

May 1st.—Patient has continued to improve, and now presents the appearance of a man in perfect health. Flesh firm, color good. Walks eight miles without fatigue. He has gained two additional pounds, and has no cough. The only evidence of disease left is slight dulness under the right clavicle, with harsh respiration, and audible experium at the apex on that side. During the following winter, 1880–81, he had slight cough, but by spring this was reduced to a mere hack. The ensuing summer was spent in the Adirondacks, where he had a slight hemorrhage. Did well at Aiken the next winter, but in the summer, while at Morristown, N. J., he had another very slight attack of bleeding. Since then he has been free from all symptoms of disease, and is to all appearances a perfectly healthy man.

Case XII. *Disease of upper portion of left lung, hæmoptysis, night-sweats, emaciation; recovery.*—A young lady, twenty-six years of age, a patient of Dr. W. W. Johnson, of Washington, D. C. The disease began with cough in September, 1879, followed by loss of weight and hemorrhage in December. Has also had night-sweats. Has lost nine pounds. She arrived in Aiken seven weeks ago and has improved, having already gained eight pounds.

March 2d.—Pulse, 108 (under excitement); temperature, 98½°. Looks quite healthy. Physical examination reveals dulness on the left side extending from the clavicle to the fourth rib, and under the upper portion of the scapula.

April 20th.—The improvement noted above continued until the middle of March, when she was unfortunate in contracting a severe cold, during which she suffered with severe pleuritic pains and lost her voice. Up to that time she had gained twelve pounds. She has now recovered from the attack and is again improving.

Encouraged by her improvement at Aiken, she concluded to remove to Santa Fé, N. M., where she had relatives. Not liking the social aspects of the place, she went to Colorado Springs; but while there a valvular affection of the heart, of which symptoms had been observed at Aiken, became so aggravated by the altitude as to necessitate her removal to the East. She returned to Aiken in January, 1881, with a severe attack of laryngitis. She looked strong and healthy, and although there was still slight dulness below the clavicle, the symptoms of pulmonary disease were evidently at a stand-still. She continued to improve after her return home, where she afterward married. When last heard of, she was quite free from pulmonary disease, although, owing to the cardiac trouble, she still had some cough. This is one of two well-marked cases of phthisis of this series in which the pulmonary disease appeared to have been arrested by the occurrence of valvular lesions of the heart.

Case XIII. *Infiltration of right lung; complete recovery.*—Male, twenty-two years of age. (Dr. J. S. Lothrop, Boston.) Lost a brother with pulmonary phthisis. Disease began in March, 1879, with cough and emaciation. Lost eleven pounds, but subsequently regained eight pounds.

March 13, 1880.—Pulse, 84; temperature, 98½°; weight, 125 pounds. Expectoration small in quantity, and of late occasionally streaked with blood. Over right front dulness above and under the clavicle. Respiration feeble, with prolonged experium. Behind there is dulness under the supraspinous fossa, the respiration being as in front.

April 23d.—Patient has had an exacerbation of his disease, with fever, pleuritic pain, and a loss of four pounds in weight. From this he soon rallied and now weighs 128 pounds, which is three pounds more than at the time of his arrival. The infiltration is slightly increased in size, there being diminished resonance to the second rib in front, and two-thirds down to scapula behind.

He was again under my care during the summer at Bethlehem, N. H., where his improvement was rapid and continuous. He afterward engaged in farming in Southern California, but tiring of the life, returned to New England. I had an opportunity of examining him in Aiken in the winter of 1885, and found him in perfect health.

Case XIV. *Slight consolidation of right lung, tinged sputa, night-sweats, emaciation; complete recovery.*—A young lady, twenty-eight years of age, a patient of Dr. Opie, of Providence. Several relatives on the maternal side, including the patient's mother, have died of phthisis. Had cough during the winter of 1878 and 1879, but was free from it during the ensuing summer. It returned again in the fall after an attack of "nervous prostration," and has persisted ever since. Has lost a great deal in weight, but does not know how much. Sputa have been occasionally tinged, and has also suffered with night-sweats. Has improved a great deal since her arrival in Aiken six weeks ago, eating and sleeping well, increasing in weight, and coughing less.

April 17th.—Pulse, 100; temperature, 99.5°; weight, 90 pounds; expectorates half an ounce. Over the right front, which is very sensitive on percussion, there is no marked dulness, but the respiration is decidedly bronchial. Posteriorly there is dulness under the scapula and between that bone and the column. The respiration over that region is bronchial.

May 5th.—Pulse, 80; temperature, 99.8°. Has gained eight pounds and has a healthy color. Coughs but little, and does not expectorate more than a drachm. (I did not have an opportunity of examining her before she left Aiken, but on meeting her a few months later at Bethlehem, N. H., I found she had been entirely free from cough for several months. The bronchial respiration had disappeared, leaving only a little roughness. The area of dulness behind, although still present, was much more limited than when I first examined her.) She afterward married, and is now quite well.

Case XV. *Extensive infiltration of the base of the right lung, fever, sweats, and rapid emaciation; complete recovery.*—A young man, nineteen years of age. (Dr. F. P. Porcher, Charleston, S. C.) Father died of phthisis. Had in August, while residing in a malarial region, on the coast of South Carolina, what was supposed to be remittent fever, but which was attended with cough, sweats, and rapid emaciation. On his arrival in Charleston, was examined by Dr. Porcher, who is reported to have pronounced it to be a case of pulmonary infiltration, with pleural effusion. His temperature has ranged from 101° to 103°, with occasional chills, without any regularity in their occurrence.

September 24th.—Pulse, 88; temperature, 102°. Has persistent cough, with muco-purulent sputa. On the right side there is dulness in front, extending from one inch below mamma to the liver. The superior border of this area of dulness extends across the axilla to a point corresponding to the angle of the scapula. The percussion sound is decidedly dull, but not flat, as in pleuritic exudation, nor does change of posture cause any alteration in the character of the dulness. Intercostal spaces well defined, and without the bulging observed in fluid exudations. I accidentally omitted to note the character of the respiration, but remember that the respiratory murmur was distinctly audible, although more faintly so than on the left side. During October the fever gradually declined, and toward the middle of the month the cough abated, and finally ceased altogether. The area of dulness remained unchanged, but there was a marked improvement in his general health, his weight rapidly increasing from 119 pounds on the 19th to 131½ pounds on the 28th, a gain of twelve and a half pounds in nine days, or at the rate of over a pound a day.

November 19th.—Pulse, which has hitherto ranged from 104 to 112, is now only 88, and the temperature has declined to 99°. He eats enormously, and his weight has steadily increased, being to-day 147 pounds, a gain of twenty-eight pounds in one month. The dulness in front is unchanged, but behind it has dropped to a line one inch below the angle of the scapula. The respiratory murmur over the region of dulness is feebler than on the left side. From this time to the date of his departure there was but little change in his condition, except a gradual diminution in the extent of the dulness. When last examined (May), the upper border of dulness in front had receded to the seventh rib, while behind it had disappeared entirely.

Remarks: The rapid improvement of the patient and the rather unusual location of the dulness would at first sight lead one to suppose that the diagnosis of phthisis in this case was incorrect, and that it was either a pleuritic exudation or some disease of the liver. The fact that the dulness, although well marked, was by no means flat, and that the respiratory murmur, noted as feeble, was, nevertheless, audible over the whole of the base of the lung, are sufficient to exclude any fluid accumulation, or any great enlargement of the liver or tumor of that organ. Besides this, the location of the dulness was not influenced by change from the erect to the recumbent posture. There was no icterus or any other evidence of hepatic disease. This patient has had no relapse and is now (1885) quite well.

Case XVI. *Both lungs diseased, consolidation of two-thirds of the right lung with cavity; complete recovery after having been confined to his bed for two months.*—A naval officer, thirty-two years of age, from Norwich, Vt. Family history not noted. On the return of his ship from the tropics, he was exposed to rough, cold weather in New York harbor, which brought on an attack of bronchopneumonia. He lost over ten pounds, and had several hemorrhages.

December 5, 1880.—Pulse, 106; temperature, 101°; weight, 114 pounds. Is very thin, and presents the appearance of a very sick man. There is marked dulness over the whole right lung in front, and posteriorly over the upper two-thirds. In front the respiration is bronchial, except under the second rib where it is distinctly cavernous. On the left side no dulness, but loud, sonorous ronchi, intermingled with moist râles. Cough very troublesome and almost incessant.

February 17th.—This unpromising case, after two months' confinement to his room, during which he suffered terribly with his cough, began to improve about the end of January. His pulse is now 98, and his temperature normal. His color is fresh and healthy; his strength is so much improved that he walks three miles in the course of the day without experiencing any fatigue; and mounts two flights of stairs without becoming short-breathed. Coughs but little, and then only in the early morning, at which time he raises a few pellets of mucus. In front there is no change in the physical symptoms, but behind, the upper portion of the lung has cleared up and is now resonant.

May 26th.—Pulse, 96; temperature, 98.5°. The improvement noted above has continued. Patient looks remarkably well, and is in excellent spirits. He now weighs 125¾ pounds, a gain of eleven and three-fourths pounds; has gradually extended his promenades, and can now walk two miles consecutively. Coughs only a little in the morning, while dressing. The improvement in this case was all the more remarkable on account of its being due to climate alone, as he took neither oil, malt, hypophosphites, or any medicine other than such as was administered to allay his troublesome cough.

The recovery in this case has proved lasting, and the patient has resumed the active duties of his profession. When last heard from he was on duty in the Mediterranean.

Case XVII. *Infiltration of both lungs, fever, hemorrhages; recovery, with a gain of twenty pounds.*—A married man, about thirty-two years of age, a patient of Dr. Riggin Buckler, of Baltimore, who kindly permits me to publish the following extracts from his letters:

"Baltimore, January 25, 1880.

"In 1870 he had trouble at the summit of the right lung; went to China, and returned in 1871 well. The physical signs still show traces of the old disease."

Dr. B. did not see him again professionally until December, 1879, when he sent for him on account of a persistent facial neuralgia, the result of a broken-down condition of health. It was found "that he had been losing weight for some time past, had morning cough, loss of appetite, morning nausea, and shortness of breath. His pulse was quick, 115; temperature, 100°; this at 11 A.M. The dulness over apex of right lung is quite limited, and there are no signs there beyond feebleness of respiration and flattening of the chest-walls. At apex of left lung (upper third) the dulness extends over a greater area. I find increased vocal fremitus, interrupted respiratory movement with feeble and prolonged expiration."

January 29, 1880.—Pulse, 102; temperature, 100.4°; weight, 130 pounds.

February 23d.—Pulse, 102; temperature, 99.2°. Has gained twelve and a half pounds since his arrival in Aiken, and walks six miles by the pedometer without experiencing any fatigue. Coughs and expectorates only in the morning, and has a good color.

March 26th.—Pulse, 96; temperature, 99.3°; weighs 150 pounds, a gain of twenty pounds since his arrival. His general appearance is that of a healthy and robust man. Physical examination reveals a marked diminution of the area of dulness on the left, the lower border of which extends now only to the second rib. With the exception of bronchial breathing at the apex of that side there are no evidences of disease in either lung.

I did not have an opportunity of making another examination, but Dr. Buckler was so kind as to send me the following report of his condition after his return home:

"Baltimore, April 12, 1880.

"W—— arrived Saturday night in the midst of a regular March blow, with the thermometer at 32°. I called on him in the morning, and was more than surprised at his wonderful improvement. His gain in the two months, by actual weight, is twenty pounds, and he has the appearance of a well man. His muscles are hard and firm, voice steady, and his skin has the ruddy hue of health. He tells me that he has *no cough whatever;* that he can breathe freely and easily, and that no amount of exercise fatigues or makes him short-breathed. His appetite and digestion are excellent, and he 'sleeps like a top.' His pulse this morning at 11 A.M. was 80, respiration 24, and temperature, 98°. I find he can expand his chest without pain, and freely and easily. I can find nothing wrong on the right side, and, with the exception of a small area of dulness (with feeble respiration) over the upper and anterior surface of the left lung, I can discover no signs of disease either in that lung. Certainly this shows a marked change as compared with the condition of things when he left this place for Aiken, and speaks volumes in regard to the fitness of the climate there for incipient phthisis. "Very truly yours,

"Riggin Buckler."

This patient had one slight hemorrhage the following winter, but since then has enjoyed good health, and at last accounts was doing well.

Result: Complete arrest of phthisical process, a gain of twenty pounds, disappearance of all physical signs of disease in the right lung, and marked diminution of the area of dulness in the other side.

Case XVIII. *Infiltration of right apex; recovery.*—A young medical student, nineteen years of age, a patient of Dr. A. G. Reed, of Philadelphia. No phthisis

in the family. Cough began in March, 1879, and lasted two months; recurred in June, and continued to September. Visited Mexico with negative results.

December 31, 1879.—Pulse, 78; temperature, 98°; weight, 125 pounds. Figure slender, with sallow complexion. Good appetite, with fair digestion. Right side: dulness over supraclavicular, clavicular, and infraclavicular regions, with diminished resonance to fourth rib. Behind, diminished resonance over the scapular region.

March 27th.—Pulse, 84; temperature, 98°. Has passed through the winter without any return of cough, and has increased six pounds in weight. In front there is now no dulness, and the area of diminished resonance has receded to the second rib; the suprascapular region has become resonant.

Result: Complete arrest of the disease, with a gain of six pounds in weight.

This patient has not been heard from since his departure from Aiken.

(To be continued.)

PERIOSTEUM-GRAFTING.[1]

Reproduction of Two and Three-fourths Inches of the Clavicle in the Human Subject by Grafting with Periosteum and with Thin Laminæ of Bone, Covered by its Periosteum, taken from the Dog.

By C. W. TRUEHEART, M.D.,

GALVESTON, TEX.

J. F. W——, a vigorous, healthy man, aged twenty-two, while bending forward dragging a gun—muzzle foremost—from under the deck of a boat, received the whole charge in the left clavicular region. About three and one-half to four inches of the central portion of the clavicle and an extensive mass of the adjacent soft tissues were shot away, and the vertebral portion of the first rib comminuted, the charge being lodged between the scapula and the ribs.

Two days thereafter, and as soon as shock was fairly recovered from, assisted by Drs. John M. Haden and Charles Ganahl, I exposed the dorsum scapulæ by a free crucial incision, trephined the bone with a one and one-fourth inch trephine, and removed sixty-four shot, three wads, fragments of clothing, and numerous spiculæ of bone.

Appreciating the importance and also the difficulties of securing union, osseous or ligamentous, of the widely separated fractured ends of the clavicle, I made haste to secure fixation of the parts and give support to the badly drooping shoulder, by means of an angular leathern splint, made to embrace the whole arm, with straps passing front and back, and buckled to a padded leathern shoulder-cap resting over the opposite shoulder.

Aided by skin-grafting the healing of the wound, except the excavation left by the portion of destroyed clavicle, was accomplished in six or seven weeks; but on the removal of the support afforded by the leathern splint, nine weeks after the injury, the shoulder was found to droop in a most disfiguring manner; and, by reason of want of fixation of the shoulder, the movements of the arm were seriously impaired.

A thorough examination revealed *no evidence whatever of any chance for union of the bone, osseous or ligamentous.* I then determined to resort to periosteal grafting. By means of the curved scissors and fuming nitric acid, the new tissue-formation in the tract of the lost bone was removed, and by scraping off the cartilage formed on the ends of the bone an excavation about three-fourths of an inch in depth below the surrounding surfaces, an inch to an inch and one-fourth in width, and measuring two and three-fourths inches between the nearest projections of the ends of the fractured bone was made. To maintain the proper length of the clavicle, a wedge-shaped axillary pad, etc., was applied. Having secured healthy granulations, rendered more vigorous by pencillings with a ten to twenty-grain solution of nitrate of silver, I proceeded to graft the wound with periosteum taken from healthy dogs, chloroformed or killed for the purpose. In case of the animals chloroformed the grafts were obtained from the superficial portions of the long bones of the legs; the scapulæ from the dog killed furnished the best grafts. I found a short, stout resection knife, curved on the edge at the point, best suited for cutting out the grafts, whether of periosteum alone or combined with laminæ of the subjacent bone, using the curved scissors for smoothly completing their separation. The grafts taken were the size of a large flax-seed, and applied with as little delay as practicable. The entire surface of the excavated wound, and the ends of the fractured bone were set with the grafts, placed about three-eighths of an inch apart. After waiting some thirty or forty minutes for the wound to take on the glazed appearance due to the drying of the lymph on its surface, the grafted surface was covered with perforated oil-silk; a compress of picked lint, moistened in two per cent. carbolized water, put on, the whole being held in place by adhesive strips.

On the fifth day, when the dressing was removed, about seven or eight out of every ten grafts of the plant were found to be in process of "taking," rather a better result than with human skin grafts.

The behavior of these periosteal grafts was peculiar. Like the human skin grafts, when applied they promptly adhered like leeches. From the sixth to the tenth or twelfth day—according to the activity of development in the individual graft—the pale red of the periosteal tissue was observed to be giving place to a deeper, brighter red. With the aid of a compound magnifying-glass, minute points of granulations, with their loops of capillaries, could be seen cropping out through and blending with the tissues of the graft. In addition to these developmental changes in the grafts themselves, the surrounding granulations of the wound seemed to take on a marked activity, resulting in a rapid envelopment of the grafts; the granulations of the wound seeming to rise up around and cover in the grafts, ultimately creating little sinus-like openings of communication between the surface of the wound and the grafts in these their sunken nests. After a few days or hours these minute openings closed entirely, leaving only little depressions to mark their site. As soon as the grafts had been thus swallowed up, another grafting of the whole surface was done as before. Three successive plants were made in this manner in the course of a month; cicatrization of the edges of the wound being retarded the meanwhile by cauterization. The excavated wound having at last become fairly filled out with granulations, the surface was skin-grafted with human skin, so as to hasten the healing over, and thus diminish the tendency to contraction of the cicatricial tissues.

Results.—Two months after the periosteum-grafting, examination of the parts revealed the fact that *the two-and-three-fourths inch gap in the clavicle had become filled out* with a tissue possessing the characteristics of bone as to hardness, inflexibility, and perfect performance of the function of giving support to the heretofore drooping shoulder. As felt, beneath the tegumento-cicatricial covering—the result of the skin-grafting—the surface of the new section of bone was nodulated and rough, like a mass of rapidly developed exostosis. It was wanting in the natural contour of the adjacent portions of the clavicle, being more flattened out in its transverse, and more or less distorted in its long axis. There was no appreciable difference in the length of the two clavicles at this time. A careful measurement, made two years later, showed the bone to be one-fourth of an inch shorter than its mate of the opposite side.

[1] Read before the Texas State Medical Association.

And now the question arises, Was this filling up of the gap in the clavicle with *osseous* tissue the result of the periosteum-grafting? Might it not have been accomplished by proliferation of scattered fragments of the periosteum, left *in situ* when the bone was shot away; or the result of developmental extension of the ends of the fractured bone? I am firmly convinced that this formation of bone resulted directly from, and could only have been accomplished by, the periosteal grafting done. I recognize the fact that we are rather prone to argue *post hoc, ergo procter hoc.* It was evident, however, from the extent and peculiar character of the injury to the soft parts that no portions of periosteum could possibly have been left behind; and from quite extensive observations in this class of injuries, in the Confederate Hospitals in Virginia, and in the late Franco-German Army Service, I am convinced that so extensive a loss of bone could not, unaided, have been restored. Besides, nine weeks had elapsed after the injury, and no effort at bone formation could be discovered when the periosteum-grafting was undertaken.

The above case of grafting was done in 1876. I have deferred from year to year its publication, hoping to have opportunities of making further trials in similar cases, but failed to find suitable cases in individuals possessed of enough good sense and freedom from prejudice to submit to obtaining even valuable healing by means of the transference of needed tissues from the lower animals to their own precious bodies. I set up no claim to originality in the extensively cultivated field of "tissue-grafting." Although I fail to find mention, in the literature accessible to me of a similar case, doubtless others have done the same, and possibly with equally good results as in my case.

Since writing the above, I have fortunately had the opportunity of examining J. F. W——, again. As the result of a severe fall, some months since, a simple fracture of the new-formed section of clavicle, with angular union, has occurred. In other respects the bone remains unchanged, except that some contraction in its transverse diameter seems to have taken place since my last examination made about three years ago.

Clinical Department.

THE DRAINAGE OF ULCERS AND SURFACE WOUNDS.

Dr. H. Reder, of Aurora, Ill., writes that, thinking upon the deficiencies of the ordinary methods of drainage and the dressing of wounds, he has been led to devise a new method. He uses a flat piece of sponge, from one-half to one inch in thickness, in the centre of which he cuts a hole corresponding to the outline of the wound, but larger than it, so that the sponge may rest about half an inch from its edges. This piece is then soaked in any antiseptic solution which may be preferred and dried under slight pressure. It is then placed on the surface, the wound occupying the open part in the centre, and over it is put a piece of tinned wire netting with one hundred meshes to the square inch, wrapped in four layers of antiseptic gauze. Over this may be applied the ordinary antiseptic cotton or jute dressing. Dr. Reder says that he has found this dressing very useful in superficial wounds of large or small area in which there was a tendency to burrowing of the pus beneath the surrounding integument. The pressure of the sponge prevents this burrowing, and, the dressing being raised above the surface of the wound, there is no maceration from the retained secretions, and scabbing of the surface is promoted. When skin-grafts are made it is necessary to keep the surface moistened with equal parts of boroglycerine and water, otherwise the rapid drying of the wound may destroy the vitality of the grafts before they have taken root. The same dressing is, however, applicable to deep wounds, the openings of the drainage-tubes being in the open place beneath the wire cover. In the dressing of amputation stumps a cap is made of wire netting which covers the end of the limb. In erosions of the os uteri Dr. Reder employs the same principle. A cap is made to fit over the cervix and to this is attached a cone of wire gauze. Over the cone is drawn a rubber cap, a hole being cut in its centre corresponding to the apex of the wire cone. A cord is also attached to the apex of the cone in order to facilitate its removal by the physician or patient when desired. After making the desired application to the erosions the cap is applied over the cervix. The discharge flows away freely, while the eroded surfaces are protected from all friction, and healing is thus promoted.

POISONING BY CHLOROFORM INTERNALLY ADMINISTERED.

Dr. J. M. Latta, of Millerton, Kan., reports the case of a boy, six years of age, suffering from tapeworm, for whom he ordered a mixture of one part chloroform in three parts simple syrup, of which one teaspoonful was to be given every hour until four doses had been taken. By mistake the parents gave the mixture in tablespoonful doses. Twenty minutes after he had taken the fourth dose of the mixture the boy said the medicine was "about to kill him;" he reeled like a drunken person and vomited violently, throwing up mucus tinged with blood. The child was rational when first seen by Dr. Latta, and said that his stomach hurt him, but in a few minutes he became unconscious. The pupils were normal, the breathing easy, and the pulse a little accelerated but regular, and rather full and bounding. The face was covered with an even red flush, arterial in tint. The temperature was not taken. It was impossible to arouse the boy by calling or shaking him. All the pillows were removed, the body was placed straight and all constricted portions of clothing loosened, and fresh air was freely admitted into the room. The pulse and respiration were carefully watched, but as they furnished no special indications for treatment, nothing more was done. The pulse became gradually less rapid, the flush disappeared from the face, and in an hour and a half the boy awoke and expressed himself as being all right. A saline was administered a few hours later and the bowels were moved, but there was no appearance of any tapeworm.

A CASE OF LABOR WITH PREMATURE RUPTURE OF THE MEMBRANES.

Dr. Ralph M. Cole, of Idaho Springs, Col., relates the case of a married woman, twenty-eight years of age, who sent for him to assist her in her fourth confinement. Her previous labors had been easy and normal. She expected to be confined about the middle of September, but on August 28th the membranes were ruptured spontaneously and about a quart of fluid escaped. From that time until September 8th there was an intermittent flow of the waters, but the patient had no pains or anything resembling pains, though the movements of the child could be distinctly felt. An endeavor was made, after the bag of waters had burst, to bring on labor by the application of hot poultices to the abdomen and the internal use of quinine in doses of three grains thrice daily, but as these measures had no effect the attempt was abandoned. Finally, on September 8th, eleven days after the membranes had broken, labor began and delivery was accomplished with the forceps. The child was alive. Dr. Cole adds that the dose of quinine given may seem very small, but that it is necessary to observe great care in the use of this drug in high altitudes, and even this small amount which his patient took caused headache and ringing in the ears.

THE SERIOUS CONSTITUTIONAL EFFECTS OF ENLARGED TONSILS IN CHILDREN.

Dr. Alfred W. Perry, of San Francisco, Cal., writes in reference to the danger to which children are exposed who suffer from enlarged tonsils. He maintains that it is a mistake to say that the associated symptoms of enlarged tonsils, tumefied lips, pallid complexion, pigeon-breast, and general debility are always due to a pre-existing scrofulous diathesis, but believes that the reverse is usually the case. He claims that hypertrophy of the tonsils is an antecedent and competent, though not an invariable, cause of the *syndrome scrophulosa*, so-called. He writes: "Where much hypertrophy of the tonsils exists, the glands barely meeting in the middle line, the breathing during the day is silent and unembarrassed; but when the child is asleep the palatal muscles are relaxed and the tonsils come in contact. This interferes with the passage of air through the fauces at the beginning of inspiration, and it is not until the aspiratory force of the chest is increased that a little air is drawn through. Then the tonsils meet again, and again separate in consequence of still further expansion of the thorax, allowing a little more air to pass. This is repeated several times, so that each inspiratory act is made up of several jerks. Breathing through the nose is prevented by the associated catarrh and swelling of the nasal mucous membrane. A child who suffers from such an obstruction to free inspiration is in a condition of semi-asphyxia during ten hours out of the twenty-four. Pallor is seen in severe bronchitis of young children, and also in pleurisy with great effusion in adults. An insufficient supply of pure air is considered a potent cause in producing that enfeebled condition which predisposes to phthisis; is not, therefore, a deprivation of pure air sufficient to produce the general debility, stunted growth, and fitful appetite seen in these children? Or, to put it differently, how could an embarrassed respiration during ten or twelve hours of each day fail to produce serious constitutional symptoms? The increased relative pressure on the chest-walls causes a yielding of their framework at its weakest part, the middle of the costal cartilages; this portion is depressed while the sternum and the sternal ends of the cartilages are pushed forward, constituting the deformity of pigeon-breast. This is what happens in young children. But later, when the costal cartilages have become more resistant, this sinking in does not occur, but the ribs assume a more horizontal direction, and the barrel-shaped chest of asthma is produced." Dr. Perry adds that he has been collecting data on this subject for several years, and has now the records of fifteen cases. All the patients had been under his observation for four or five years, or longer, and nearly all were robust children up to the time the tonsils became enlarged. But from that time, with no other sickness than recurrent attacks of tonsillitis, they became pale, thin, listless, had capricious appetite, with frequent attacks of indigestion, and gradually acquired the deformed chest. They were all the children of stout, healthy parents, and ought to have remained so themselves, as they were during the first three to six years of life. And the writer maintains that the hypertrophy of the tonsils must have been the cause of the deterioration of general health. He excludes rachitis as a cause, for the reasons that that disease is very rare in his part of the country, and that it never commences after the first dentition is complete, or in previously healthy children. Of the fifteen cases of which he has records he excised one or both tonsils in eight. In every one of these there was, within a week after the operation, a great improvement in appetite, color, and general spirits; and within a few months the gastric troubles ceased, the children increased in weight, and good health was restored. In those not operated upon no improvement took place. The writer concludes that "the importance of any condition which, on the threshold of life, arrests development and lowers vitality, and produces an evil effect on all later life, cannot be exaggerated. It is worthy of most serious attention, especially as the remedy, excision of the tonsils, is so simple, safe, and speedy in its curative effects."

COCAINE IN GENERAL SURGERY.

Dr. A. G. Browning, of Maysville, Ky., writes that he was called to see a lady suffering from a felon which she had treated by poulticing, pricking, etc., without relief. The integument was abraded, and presented a good surface for endermic medication. A four per cent. solution of cocaine was applied and repeated in ten minutes, after which the finger was incised down to the bone without causing pain. In another case of ingrowing toe-nail, after the subcutaneous injection of ten minims, the nail was slit and a portion removed without complaint on the part of the patient. In a third case, one of earache without inflammatory symptoms, in a boy six years of age, a two per cent. solution was dropped into the external auditory canal, and immediate and permanent relief was obtained. Finally, in a case of organic stricture of the urethra in which there was also a spasmodic element, very marked benefit followed the injection of about ten minims of a four per cent. solution. Dr. Browning adds that he has never witnessed any unpleasant effects which could be attributed to the action of cocaine employed as a local anæsthetic.

OVARIOTOMY PERFORMED DURING AN ATTACK OF ACUTE GENERAL PERITONITIS —RECOVERY.

Dr. William Fox reports the following case: Mrs. H——, aged thirty-eight, was married when very young, and had a child when only sixteen years of age. She began menstruating when twelve years of age and has always been regular, but suffered extremely at each period, more since the birth of her child than before. She became a widow at twenty-five, and remained so for six years, when she married again. Twelve years ago she began to suffer from indigestion and a feeling of discomfort in the lower part of the abdomen, which became somewhat enlarged. The abdomen gradually increased in size, but the patient was never ill until four years ago, when she had an attack of peritonitis, confining her to the bed for two months. After a tedious convalescence, she remained fairly well until June 20th of the present year, when she was again seized with acute general peritonitis. The abdomen had been increasing still more during the past ten months, so that the patient believed herself to be pregnant, and had engaged Dr. J. W. Fisher to attend her. He was summoned on the morning of June 20th, and made a diagnosis of ovarian cyst with acute peritonitis. Dr. Fox was now called in consultation, and three days later Dr. H. Senn was also requested to see the patient. There was at this time great distention of the abdomen, the pulse was rapid and wiry, the temperature ranged from 101° to 103°, the respiration was rapid and entirely thoracic, and intense pain was experienced. Distinct friction could be felt when the hand was applied over the tumor on the right side. After the peritonitis had existed for a week, the woman's condition having grown continually worse, it was determined to operate, this being apparently the only chance of salvation for the patient. At this time stercoraceous vomiting had begun, and death seemed to be inevitable unless something were done at once. A room in the attic of the house was made thoroughly aseptic, and the patient was removed to it for operation. Upon opening the abdomen the evidences of a dry peritonitis, such as has been described by Mr. Tait in these cases, were manifested. The tumor was a monocyst, with a number of small endocysts near the pedicle. It was emptied by means of Emmet's trochar and drawn through the abdominal wound. The pedicle, which was

short and very thick, was divided by the hemostatic forceps into four sections, each of which was separately ligated with silk. The end of the stump was covered with peritoneum, the edges of which were approximated by a continuous catgut suture. No fluid was found in the abdominal cavity. The left ovary was healthy. The wound was closed, after a careful toilet of the peritoneal cavity, with four deep sutures of aseptic braided silk and an equal number of superficial catgut sutures. With a view to guard against engorgement of the large vessels, a bandage of elastic webbing was applied over the Lister dressing. An improvement in the patient's condition was seen immediately after the operation; the respirations were less rapid, and the pulse became slower and of better volume. This improvement could be attributed to nothing but the removal of the excessive intra-abdominal pressure.

Progress of Medical Science.

Pseudo-hypertrophic Paralysis and Thompsen's Disease.—Dr. Vigoureux relates a case in which there was pseudo-hypertrophic paralysis coexisting with the group of symptoms known as Thompsen's disease. There was an exaggerated patellar tendon reflex, and under the stimulus of either the galvanic or faradic current were noted a hardness and rigidity of the muscles, unusual in pseudo-hypertrophic paralysis. The disease in the case reported dated back to early infancy.—*Rivista Clinica e Terapeutica*, July, 1885.

Permanganate of Potash Baths.—Dr. Hüllmann recommends baths in a solution of permanganate of potash in the treatment of the so-called scrofulous exanthemata, in prurigo, eczema, intertrigo, and especially in the period of desquamation of measles, scarlatina, and varicella. The baths should be of the strength of one grain to the pint. The permanganate may first be prepared in concentrated solution in hot water, and afterward added in the proper proportion to the water of the bath.—*Centralblatt für Klinische Medicin*, No. 28, 1885.

Treatment of Dilatation of the Stomach by Electricity.—Dr. Predazzi reports in the *Rivista Clinica e Terapeutica* for July, 1885, two cases of atonic dilatation of the stomach successfully treated by the application of the faradic current to various parts of the abdominal parietes over the enlarged organ. The electricity was applied in this manner for about two minutes each day, and at the end of ten and twelve days respectively a very marked improvement was noted. In addition to the faradic current, the patients were put upon a milk diet and the stomach was washed out each morning with a pint and a half of a 7 per 1,000 solution of bicarbonate of soda.

The Action of Santonine Upon the Liver.—Dr. A. Battistini has been making a number of experiments to determine the physiological action of santonine. He reports that it acts especially upon the liver, increasing the secretion of bile, but causing no alteration in the composition of this secretion.—*Lo Sperimentale.*

Pulmonary Abscess Following Pneumonia.—Drs. Foá and Rattone report in the *Gazzette delle Cliniche Mediche di Torino*, vol. 21, a case of fibrinous pneumonia, complicated with abscess, in which they found two distinct species of micrococci which they were able to cultivate separately. The one was the pneumococcus, the other a very small spherical body which, when injected beneath the skin of a rabbit, gave rise to a cold abscess. In the pus of this abscess, among the anatomical elements, were seen the same minute spherical organisms which had been isolated in the culture. From these observations the writers conclude that pulmonary abscess should not be regarded as a sequela of fibrinous pneumonia, but rather a complication, due to the lodgment in the hepatized lung of a special pyogenic micro-organism.

Cutaneous Eruptions in Cholera.—Dr. A. Montefusco, of Naples, has published a monograph treating of the cutaneous eruptions observed in the different stages of cholera. In the prodromal stage the author noted several forms of eruption, but principally urticaria. This was seen more frequently in women than in men, and particularly in those who had suffered from great mental disturbance—fear of the disease, violent anger, and the like. It was preceded by an intense itching, and it lasted from a few minutes to several hours. Another form observed in the prodromal stage was erythema. It was seen in patches here and there over the face, upper extremities and trunk. The eruption appeared usually simultaneously with the first symptoms of the disease, but was of no prognostic value as regards the mildness or the severity of the attack. In one instance the writer observed in the algid stage a number of small pustules, some diffuse and some confluent, which caused the patient great discomfort, but which disappeared gradually as reaction progressed. It was, however, in the stage of reaction that the greatest variety of eruptions was seen. Most commonly maculæ were noted, of a pale red color, disappearing usually on pressure, and scattered irregularly over the entire body. This eruption faded away on the third or fourth day. Sometimes these maculæ, especially on the extremities, were converted into pustules, and then the eruption disappeared much more slowly. Urticaria was very common and spared no portion of the body, appearing sometimes under the form of maculæ and sometimes as wheals. In two cases the eruption began in the scars resulting from the hypodermic injection of ammonia, and it remained confined to this neighborhood. After urticaria the most frequently observed lesion was acne, which prevailed in individuals of somewhat advanced age, and especially in women. This acne was located chiefly in the limbs, and appeared in the form of small red nodules, painful on pressure, lasting from three to five days. In cases in which the reaction was incomplete and irregular, and in which a typhoid condition supervened, the cutaneous manifestations were very numerous, appearing frequently from the seventh to the ninth day. Besides the forms above mentioned were seen hemorrhagic spots, with or without a previous urticaria, phlyctenoid, erysipelas, erysipelatous zones formed around the points of injection of the ammonia, or eruptions resembling those of measles or scarlatina. The eruption of measles was seen during the period of susidence of the epidemic and was manifested chiefly in young girls or female infants. In two cases a scarlatiniform eruption was noted, and in one it was associated with petechiæ. In some individuals there was an eruption of papules, passing into pustules, and ending with the formation of large crusts which persisted for a long time. As to the prognostic value of the cutaneous eruptions, Dr. Montefusco observed that the patient usually recovered when the eruption appeared in the prodromal stage or in normal reaction, but that when it was hemorrhagic or when it made its appearance in a stage of incomplete or typhoid reaction, the result was invariably fatal. In the morbillous eruption the prognosis was favorable.—*Lo Sperimentale*, No. 6, 1885.

Growth of Teeth in a Fœtus.—Dr. Weddize reports in the *Allgemeine Medicinische Central-Zeitung*, No. 55, 1885, a case of labor in which he was called to assist the midwife on account of some complication. Delivery was finally accomplished, and while the child was being bathed it was found that it had the two lower incisor teeth almost through the gums. The mother said that she had given birth six years before to a girl in whom the two lower incisors were already in sight. In this child the two teeth which had made their appearance so early in life fell out at the end of two years.

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THE CHANCES OF AN INTERNATIONAL MEDICAL CONGRESS IN AMERICA.

IT is evident that the work done by the Committee of the International Congress at its secret meeting in this city is an utter failure. The Committee has won over no new friends, but, on the other hand, withdrawals continue to be made. We believe that there is no exaggeration in saying that there are not half a dozen representative men in the profession now who are prominently connected with the organization of the Congress.

The attempt to hold an international meeting under such circumstances seems certainly very wrong, while, if affairs continue on as at present, there will be a collapse of the whole affair before the year 1887. It is known that some of the gentlemen who withdrew from the Congress did so partly because they found that they could not get co-operation at home or abroad; they could not organize sections so as to secure successful work; and this difficulty must steadily increase.

Beyond all this, the obstinate conduct of the gentlemen who are trying to arrange the Congress on American Medical Association principles is arousing a constantly stronger indignation among the profession at large. It is clearly seen that their perversity and disloyalty are bringing discredit upon American medicine.

Since there are no hopes of a genuine International Congress under the present management of affairs, the question arises as to what is the best course to pursue. Either the profession must take hold of the matter and reorganize anew, or we must beg our European brethren to withdraw their invitation. We should greatly regret to be forced to the latter alternative, especially as American physicians are very earnestly desirous of having the International Congress held here.

This being so, it only remains that they strive to act harmoniously and energetically with a view, at the next meeting of the American Medical Association, of reconsidering the hasty and ill-considered action taken at New Orleans. It will only be necessary, after all, that at the session in St. Louis, next spring, the policy of the original Committee be adopted, and that of the present Committee rejected. A large part of the detail work needs no change. Such restorative action might be criticised as inconsistent, but the injury of such criticism would be small indeed compared with that wrought by a pursuance of present methods. For it cannot be too often or too emphatically reiterated that a Congress like the one now being foisted upon us, a Congress that has been inoculated with the poison of a foreign and disorganizing issue, will be practically a failure. The removal of this issue, even so late as next spring, would still give time for organization to be effected. While there is yet this possibility of some change being effected at St. Louis, we will not quite give up the Congress. But meanwhile it will be hardly necessary to say that those who wish well of their profession will carefully keep aloof from all connection with the present Committee on Organization, which might better be called a Committee on Disorganization. This Committee should be vigorously let alone.

FERRAN'S STATISTICS OF CHOLERA INOCULATION.

WE have received a small pamphlet purporting to be the first series of statistics concerning the effects of the so-called preventive inoculation of Asiatic cholera. It contains reports from seven towns in Spain in which the cholera was prevalent during the past summer, and covers a period of about three months from the middle of May to August 10th. The reports are certified to by the local physicians, the alcade, or mayor, and, in most cases, also by the municipal judge and the parish priest, and have, furthermore, a notarial certification. They would seem, therefore, to be both official and authentic, and are undoubtedly as nearly correct as statistics gathered in times of panic and general distress can be. The seven towns are Alberique, Alcira, Benifayó, Cattaroja, Cheste, Chiva, and Masanasa, with an aggregate population of 41,641. The tables give the number of invasions and of deaths among the inoculated, the re-inoculated and the uninoculated. The statistics of the re-inoculated, however, are not complete, as the decree making it illegal for anyone but Ferrán himself to practise the experiment rendered it impossible in most cases to inoculate the second time. It will be remembered that Ferrán asserts that the second or "massive" inoculation will assure certain immunity to the subject. But from the few figures presented it would seem that this claim is not borne out by facts, for in Alcira there were 55 invasions, with 9 deaths among the 8,830 individuals who were reinoculated.

But it is in the effects of primary inoculation that we are chiefly interested, for if every inhabitant of a city like New York must be inoculated twice before he is protected from cholera, the epidemic would wear itself out or be killed by frost before the physicians would have finished their work. In the tables before us we find that out of a total of 41,641 inhabitants, 20,382 were inoculated by Ferrán or his assistants, leaving 21,259 who could not or would not avail themselves of the protection offered them. Of the latter number, 1,584 (or 7.45 per cent.) were attacked by the disease, and of these 824 (or 52.02 per cent.) died. Of the 20,382 inoculated, only 232 (or 1.13 per cent.) were attacked, and of these 75 (or 32.33 per cent.) died. These figures do certainly seem to point strongly to the efficacy of inoculation as a preservative measure, especially when we consider that the experiment is a new one, and Ferrán cannot be supposed to have been as skilful in his early operations as he might claim to be after having had more experience; and, furthermore, it might reasonably be asserted that

when inoculations were practised in such a wholesale way (as in Alberique, for instance, where 594 of the inhabitants were inoculated in one day), many would fail to "take," and then, if one of these individuals acquired cholera, a mark would be scored against the method.

But there are other points to be taken into consideration. Fear, as is well known, is a potent factor in predisposing to cholera, and the feeling of security resulting from having undergone the operation may have conduced to the immunity enjoyed by the inoculated. Again, the statistics before us embrace only seven small towns, in none of which, Alcira excepted, was there a population of six thousand souls, and it may be that the reports from other places will be less favorable. As Ferrán, in his preface to the pamphlet, truly says, if it were a question of the efficacy of some new remedy these figures would be accepted without hesitation, and physicians the world over would at once adopt the method of treatment in their practice with every confidence of success. But the weight of evidence needed to establish any theory as a fact varies greatly according to the antecedent probability or improbability of the theory. Now the theory of preventive inoculation of cholera is antecedently improbable and is so regarded by nearly every scientific man whose opinion carries weight and who has studied the subject at all, and the testimony in its favor must, therefore, be overwhelming in order to be convincing. We do not think that Ferrán has yet proved his theory to be a fact. We wish he had, but he hasn't, and we fear he must produce stronger figures than these before he can obtain the coveted prize which awaits the discoverer of a means of preventing cholera.

SOME SIMPLE HISTORICAL STATEMENTS.

For copiousness of statement and fertility in explanation our esteemed contemporary, the *Journal of the American Medical Association*, has, we believe, no historical parallel.

In its issue of the 26th ult., the whole story of the organization of the Ninth International Congress is retold, with the express assurance that this is the only truthful and historical account. We regret to find, however, that our official contemporary, while stating in an agreeable manner what every one knows, is absolutely incorrect in representing the spirit of the present issue.

We are told, for example, that at the meeting of the Association in New Orleans, the report of the original committee "was freely criticized, several members pointing out the fact that . . . it had given undue prominence to a particular portion of the profession which was well known to have arrayed itself in opposition to the State and National organizations."

The "historical facts" here are that the members in question said nothing about "undue prominence," but urged that the particular portion of the profession referred to should receive no recognition at all, but, in fact, that it should "be taken by the top of the head and its throat cut at once." It is unfortunate that our contemporary forgot about this bit of medical Burchardism. It is bound to be an essential part of history.

Our contemporary, continuing its simple historical recital states that the resolutions then adopted, appointing an enlarged committee, "contain not one word about the Code of Ethics, . . . and prescribe no rule either for the membership, government, or officering of the Congress." Apart from the fact that the foregoing sentence is not very good English, we can find no fault with it as "a historical statement." But unfortunately it has only a technical and historical value. It is very well known that the new committee was expected to ignore all persons of New Code affiliations. If not, why was it that the chairman elected for this new committee, Dr. Cole, was a gentleman who said distinctly, in discussing the Keller resolution, that "he would place none in official positions who were not recognized as loyal to the Code of Ethics."

Our contemporary is to the last degree disingenuous. It knows very well that the New Orleans committee was expected to leave out of the Congress all New Code or no Code men. They did this at the meeting in Chicago. They were forced by public opinion to yield a little at their subsequent secret conference in New York. If the New Orleans resolutions were passed with the intention of still leaving out the Code issue, why does not the present committee recognize the fact? If the Association meant not to have an ethical issue brought in, as our contemporary would have it inferred, then the Committee has been stupidly, criminally wrong in introducing it. Let us have a simple historical statement regarding this committee, and as to the authority by which it excludes a large number of eminent men from the organization of the Congress. This would fitly complete the diuresis of explanations and "simple historical statements" which our Chicago contemporary has been making.

News of the Week.

A Quarrel among the German Physicians.—The appointment by Prince Bismarck of Dr. Schweninger as professor in the Berlin University, has ended in producing a very lively quarrel in the medical world of Germany. It seems that last February, when the question of voting Schweninger his salary came before the Lantag, Dr. Graff, presumably at the dictation of Bismarck, supported the motion for the salary. In speaking in favor of Schweninger, he seems to have used very little tact, and even to have ventured to cite the case of the appointment of Virchow as a precedent. The comparison of Schweninger to Virchow has roused the deepest indignation among the Berlin physicians. Although, like most Germans, not gifted with a great amount of civic courage, they have entered upon a vigorous warfare against Dr. Graff. This gentleman has for several years been President of the "Deutscher Aerztevereinbunde," a position of considerable political importance. The fight is now to prevent his re-election.

The Cholera.—The number of new cases of cholera in Spain is steadily decreasing. The ratio of mortality is also less than at first. Cholera holds its own still in certain parts of Italy. In Palermo, for example, there were 162 new cases reported on September 28th. In Spain the daily number of new cases is about 500.

WHY THE FRENCH CANADIANS IN MONTREAL REFUSE TO BE VACCINATED.—Dr. L. D. Mignault, of Montreal, Canada, sends us the following: "In reading this morning your article entitled 'The Montreal Epidemic, and the Utility of Vaccination,' I was struck by a statement therein, to which as a Montrealer and a French Canadian, I must take exception. You say: 'It appears that the Canadian Catholics, on religious grounds, do not allow themselves to be vaccinated.' The answer to this lies in the fact that not only has vaccination been recommended by an episcopal circular from the Bishop of Montreal, but moreover, nearly every religious community in town has been revaccinated within the past month. At the same time many such communities have forced all their servants to be revaccinated under pain of instant dismissal. You may see by this that objections to vaccination do not rest upon religious grounds, but, as I will explain, have an entirely different origin. In the first place, for several years medical men, whose experience and ability have gained for them public respect and confidence, have unhappily been pleased to flood the press with articles denouncing vaccination, and representing it as the source of many evils, not excluding small-pox itself. At the same time ward politicians and others have from time to time denounced in thrilling terms the horrors of vaccination, aiding their oratorical efforts with vividly colored plates. Secondly, a few cases of erysipelas and other accidents bore out to a certain extent some of these statements, and thus the public mind became biassed against vaccination. The French Canadian, like all representatives of the Latin races, is of a thoroughly inflammable nature, and subject to strong prejudices. With time, patience, and reasoning vaccination will certainly come again into universal favor in our city, and already many of its strongest opponents have become entirely reconciled to it."

CHOLERA ON A VESSEL BOUND FOR NEW YORK.—An Italian bark, hailing from Marseilles, arrived at this port last Saturday, and reported that one case of cholera had appeared on board three days after the vessel started. The patient died in twenty-four hours, and no further case developed. Great care has been taken by our health officers to see that the vessel was properly disinfected and quarantined. No trouble can possibly be expected from it at this date.

THE SMALL-POX IN MONTREAL.—It is estimated by some that there are between 3,000 and 4,000 cases of small-pox in Montreal. The Health Board, however, reported only 48 deaths from this disease on September 28th.

A CASUALTY COLUMN FOR PHYSICIANS will, we fear, have to be opened if the returns of homicide, suicide, etc., continue as at present. On September 28th, the papers report that Dr. G. W. Barton, of Bloomington, Ill., was shot and killed by Dr. H. L. Harris, of the same town. It seems that the quarrel arose indirectly out of Dr. Harris's coming to Bloomington and cutting into the practice of Dr. Barton. This latter gentleman resented it and made some harsh criticisms upon his confrère which gave occasion for the quarrel. Perhaps one of the minor morals to be drawn from the unhappy event is that the medical profession is very much over-crowded. It is not very unnatural that, when a new man enters a town and proceeds to take away some of the practice of the older physician, there should be hard feelings. Both claim that they must live, and no doubt the claim is somewhat reasonable.

CHANGES IN HOSPITAL DISTRICTS.—A new emergency hospital has been or is soon to be opened at Gouverneur Slip. This hospital will receive cases from the Seventh, Tenth, and Thirteenth Precincts. Another emergency hospital is to be opened on the East River front, between One Hundred and Eighteenth and One Hundred and Twenty-fifth Streets. It is stated that there is some feeling manifested about a proposed arrangement to give the New York Hospital the Twentieth Precinct, which will leave the Roosevelt Hospital with but one precinct, the Twenty-second. Such a system would give the New York Hospital an immense territory, so that a compromise has been suggested by which the Roosevelt Hospital is to have one-half of the Thirty-first Precinct—the territory included by Forty-second and Eightieth Streets, Sixth and Eighth Avenues and the North River.

AN ANTI-VACCINATION RIOT IN MONTREAL.—The by-law passed by the Provincial Board of Health, making vaccination compulsory, having appeared in the *Official Gazette*, increased the excitement among the French Canadians in Montreal to such an extent that a riot broke out in the east end Tuesday morning, and before the crowd dispersed they smashed many of the windows of the East End Health Office. The riot continued the next night and considerable damage was done. Of course, an obstinate prejudice among the ignorant, fostered by fanatics and a few so-called physicians, was the exciting cause of the riot. But no doubt race feeling had something to do with it. Medical opinion is practically unanimous on the subject of the utility of vaccination, and it is idle to discuss its claims.

CIVIL SERVICE AT THE HOSPITALS.—That wonderful adaptability of questions to candidates sometimes seen in civil service examinations, has at last appeared at the hospitals. At a recent examination in this city, one of the candidates was asked among others, the following questions under the head of "Practice." "Give the highest specific gravity of the blood ever known in diabetes?" "In what country do you find the most tapeworms?" "Number of ova laid by one segment of a tapeworm?" "In what part of the intestine do you find the most cystocerci?" We think the examiner might have profitably added one or two more. "If a man has a tapeworm, and takes an anthelmintic, how much of the worm will he pass at the first sitting?" "Will the worm like being passed?" and "If the worm does not like being passed, what is he going to do about it?"

DR. THOMAS MACINTIRE, for twenty-five years Superintendent of the Indiana Institution for the Education of Deaf-Mutes, but more lately of the Pittsburg institution, died on Friday of last week, after a protracted illness, in the seventieth year of his age. He was one of the best known deaf-mute instructors in the country.

Reports of Societies.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

Stated Meeting, September 28, 1885.

DANIEL LEWIS, M.D., PRESIDENT, IN THE CHAIR.

DR. A. F. CURRIER read a paper on

GONORRHŒA IN THE FEMALE,

in which he first presented the argument in favor of its being an infectious disease, due to a micro-organism, or gonococcus.

In most cases it was limited by the os internum; less frequently it invaded the urethra and bladder; extension of the process through the Fallopian tubes to the peritoneum was possible, and this fact had been known for many years. Gradually the profession was approaching the acceptation of the views announced by Dr. Noeggerath in 1872, who directed attention to a particular form of the disease, namely, that which involves the Fallopian tubes, and in addition to simple catarrh and hydro-salpinx there are other more serious conditions, usually of an infectious nature, either tubercular, syphilitic, or gonorrhœal. The gonorrhœal form most frequently goes with pyo-salpinx, but the latter was not necessarily of gonorrhœal origin. The diagnosis rests upon the discovery of the gonococcus.

With regard to prophylaxis, Dr. Currier believed that any class of persons who were liable to distribute infectious disease should be under properly regulated medical police regulations.

Marriage should not occur as long as gonococci could be found in the discharges.

According to Oppenheimer, corrosive sublimate, creasote, and nitrate of silver are the only germicides which destroy the cultivated microbes.

Other remedies, however, had been used clinically with success, and that which had given Dr. Currier the best results was a combination of nitrate of bismuth and glycerine; he had not obtained satisfactory results with a sublimate solution. Bismuth one drachm, glycerine one ounce, applied upon a cotton tampon, which was allowed to remain ten or twelve hours, then removed and the vagina washed with hot-water injections. Perhaps the mixture was not directly destructive, but its action deprived the microbes of the material necessary for their propagation and they died of starvation.

Dr. Noeggerath had said that it could not be cured, but Dr. Currier believed that if the case was treated sufficiently thoroughly and for a sufficient length of time, the disease could be cured; that is, the micro-organisms could be killed.

DR. H. T. HANKS said it was still a mooted point whether or not the disease was produced by a specific germ; but the results and the method of treatment were well known and generally accepted. He believed that a very large percentage of the diseases peculiar to women were due directly to gonorrhoea. He regarded it, however, as practically impossible to make a diagnosis in most of the women in well-kept houses, because of their habits of cleanliness. But the results were practical, and the question was, what could be done to prevent the suffering entailed by the disease. He thought all should go to work with more confidence than had usually been expressed that the affection could be cured. Patients should be treated every *third* day, except for about eight days, including the period of menstruation. His favorite plan had been to *distend* the vagina from four to six times a day with a solution consisting of chlorate of potash, two drachms, and hot water, one quart. When this was carried out thoroughly, so that every portion of mucous membrane was washed with the solution, the disease would be generally stopped quickly. It was most essential that frequent and copious warm-water douches be made, keeping the parts absolutely clean, every three or four hours; the medication of the solution —whether it be carbolic acid (℥ j. to ℧ ij.), chlorate of potash (℥ ij. to ℧ ij.), or corrosive chloride of mercury (gr. ij. to ℧ ij.)—was of less importance, either will cure when used frequently and in copious quantities.

DR. GARRIGUES had not looked for the gonococcus, but had diagnosticated his cases by the virulence of the inflammation. He had found that the glands of Bartholini were very liable to be affected, and that then the case proved obstinate. His method then was to lay the abscesses open and wash with a sublimate solution 1 to 2,000. According to his observation the disease does not, as a rule, attack the urethra, as was formerly taught. In the treatment of the chronic conditions glycerine, with or without medication, worked very well.

DR. BOLDT thought the urethra was not affected so infrequently as perhaps might be inferred from the paper and the remarks made during the discussion. His treatment had consisted in the use of equal parts of glycerine and a saturated solution of boracic acid, together with injections of boracic acid, half an ounce to a gallon of water. In the majority of cases, it would be well toward three months before cure could be effected.

DR. H. G. LYTTLE said that, when House Surgeon in Charity Hospital, the practice was to apply plain glycerine upon a tampon, confine the patients to the bed, and that they got well in two weeks, as a rule.

DR. MESSENGER said that the injections should be given by the physician, as no woman could properly syringe herself. The vagina must be thoroughly distended, and the bichloride solution was the best remedy he had used.

DR. CURRIER said, in closing the discussion, that the urethra was not apt to be involved in the majority of cases, and that the anatomy of the parts favored this immunity. Again, symptoms of supposed urethritis were, perhaps, frequently simple inflammation of the peri-urethral glands, which open upon the floor of the urethra. He thought it quite probable that the glycerine, in all the mixtures named, played an important part, but he was also certain that bismuth was a valuable remedy; he was also quite sure that the two remedies were improved by being mixed with each other.

DR. GEORGE HENRY FOX, then read a paper entitled

REMARKS ON THE TREATMENT OF LEPROSY.

Cure of this disease was rarely hoped for by either physician or patient. But he thought it should not be regarded as necessarily an incurable affection. The point to which he wished to direct special attention was the *morale*, the *mental condition of the patient.* To inspire hope and confidence was a most important point in the treatment of leprosy. The full belief, on the part of the patient, that leprosy is an incurable disease, he believed, counteracted the effect of medical treatment. It is a contagious disease. It is quite probably transmitted by hereditary influences. Aside from inheritance, leprosy is only communicable by inoculation of the blood with the morbid secretions of an affected person. Compulsory segregation is undoubtedly judicious. The chaulmoogra oil is probably the remedy which has afforded the best results.

DR. F. C. FULLER had seen a large number of cases of leprosy in the West Indies, where but little restraint was placed on their movements, and where also its contagiousness was quite well established.

DR. J. A. MOORE had also seen a large number of lepers in the West Indies, and thought that the buoyancy of their feelings was most remarkable. As he had observed it, the disease seemed to progress to a certain point and then become stationary. With regard to heredity it was very apt to skip an entire generation, and then not reappear in all the members of a family.

DR. J. C. PETERS had seen the lepers in Havana, and

while they lived like dogs, they seemed to be perfectly happy and indifferent as to their condition.

Dr. D. Bryson Delavan had seen a large number of lepers with Professor Hansen, of Norway, where the disease was regarded as hopeless so far as cure was concerned, yet the care which these people received was far superior to that given them in any other country. Comparative isolation had been advantageous, and had reduced the number from three thousand to scarcely seventeen hundred, and the government hoped to eradicate the disease entirely, although the chronicity of the affection was such that twenty years had already been spent in that direction. It was usually found among the lowest classes, yet the disease occasionally appeared in other places. In the way of treatment very little was done, except to endeavor to alleviate the more distressing symptoms. It was well known that Prof. Hansen was the discoverer of the bacillus lepra and was an acknowledged authority on this subject in Europe. The hospitals for these patients were in good condition, but it was through isolation that the best results, so far as eradicating the disease was concerned, were expected.

Dr. Piffard had never known it to spread among the good classes, whereas among the lower classes it certainly did spread. Where there is a good deal of the disease, treatment amounts to nothing. During the last ten years he had had under his observation probably *thirty* cases, and of these only *two* died, and every case improved under the systematic and persistent use of chaulmoogra oil and strychnia with natural combinations, chiefly, as hoang-nan. He had been unable to keep up the use of these remedies very long at any one time, and had, therefore, given one as long as it was possibe to get the patient to take it, and then substituted the other and continued it in the same way. He had not seen a case cured, but had seen patients benefited to an extent which permitted them to return to lives of usefulness. He believed that there were some fears of contagion.

The Society then adjourned.

THE MEDICAL SOCIETY OF VIRGINIA.

Sixteenth Annual Meeting, held at Alleghany Springs, Montgomery County, Va., September 15, 16, *and* 17, 1885.

Tuesday, September 15th — First Day — Evening Session.

The Society was called to order at 8 P.M. by Dr. Bedford Brown, a railroad accident having prevented the President, Dr. S. K. Jackson, from arriving in time. About one hundred and fifty members were present.

DELEGATES FROM OTHER SOCIETIES.

Drs. Archer Atkinson, of Baltimore, and J. S. Conrad, of Matley Hill Sanitarium, were present as delegates from the Medico-Chirurgical Society of Maryland, and Dr. Thomas R. Evans from the Medical Society of West Virginia. Dr. George T. Harrison, of New York, Honorary Fellow, and Dr. William G. Eggleston, of Chicago, a member of the Society, were also present. Over one hundred new members were received into the Society.

Dr. H. M. Clarkson, of Haymarket, delivered the

ANNUAL ADDRESS TO THE PUBLIC AND PROFESSION,

before an audience of some four hundred ladies and gentlemen in addition to the members. The address dealt chiefly with the question of medical societies and of their relation to the public.

Dr. Isaac White, of Alleghany Springs, read a paper on the

MEDICAL PROPERTIES OF THE ALLEGHANY WATERS.

The temperature of the springs is 56° F., and the waters contain baryta, strontia, and magnesium salts. Owing to the presence of the two former ingredients the waters are somewhat similar in their effects to those containing arsenic. The speaker did not regard the waters as a "cure all," but was convinced of their great value in the treatment of dyspeptic disorders. The dose was one glassful, gradually increased to two, before meals, varying however as it was desired to secure tonic, diuretic, or cathartic action. When first taken, the waters sometimes caused a feeling of giddiness or even headache, and might cause erythema, eczema, or an eruption of furuncles.

Dr. William C. Dabney, of Charlottesville, in his capacity as President of the Board, read the

REPORT OF THE VIRGINIA STATE BOARD OF MEDICAL EXAMINERS,

showing that since the beginning of the year, thirty-two candidates had passed satisfactory examinations and had been licensed to practise medicine in the State, while six had been rejected. All of the candidates were college graduates.

Wednesday, September 16th—Second Day—Morning Session.

Dr. S. K. Jackson, of Norfolk, delivered the

PRESIDENT'S ADDRESS.

The speaker said that he regarded his elevation to the highest office in the gift of the profession of Virginia as an expression of appreciation of his endeavor to interest the Society in the question of zymotic diseases, especially as regards prophylaxis. He first considered the impediments in the way of rapid progress of medical science, then dwelt upon the factors favoring its recent high development, and finally discussed the measures which seemed most efficacious in ensuring its continued growth.

Dr. Thomas J. Moore, of Richmond, opened the subject for general discussion by reading a paper on

SCARLET FEVER,

accepting the classification of the disease, usually adopted by American writers, into scarlatina simplex, anginosa, and maligna, and describing very minutely the classical types of each of these forms. Then, after tracing the history of the disease from its first definite description by Sydenham, the speaker dwelt upon its etiology, and also discussed the germ theory of disease. He was not prepared to accept either the *Monas scarlatinosum* of Klebs, or the *Plox scindens* of Eklund, as the bacillus of scarlet fever, and did not believe that the specific microbe had yet been discovered. On the subject of treatment, the author rejected belladonna as useless in prophylaxis and of very little value in palliating the symptoms. For the reduction of temperature he preferred the external application of cold by means of an ice-bag to the head, the wet pack, or, as a last resort, the cold bath. His favorite internal antipyretic had been quinine, but he hoped much from resorcin, and urged his hearers to test its efficacy as opportunity offered. Externally he used a mixture of carbolic acid, ♏ xv.; borax, ʒ j., and glycerine, ʒ j., and was pleased with its action. In the dropsy of acute desquamative nephritis he recommended the exhibition of small doses of mercury for a few days when the ordinary diuretics were not accomplishing the desired end.

Afternoon Session.

This session was devoted to the

ELECTION OF OFFICERS.

for the ensuing year. The following were elected:

President—Dr. Rawley W. Martin, of Chatham.

Vice-Presidents—Drs. John S. Apperson, of Town House; T. B. Greer, of Rocky Mount, and H. M. D. Martin, of Fredericksburg.

Recording Secretary—Dr. Landon B. Edwards, of Richmond.

Corresponding Secretary.—Dr. J. F. Winn, of Richmond.

Treasurer—Dr. R. T. Styll, of Richmond.

Dr. Hugh T. Nelson, of Charlottesville, was appointed to deliver the annual address to the public and profession in 1886, and Dr. L. Ashton, of Falmouth, to lead in the discussion on "Puerperal Septicæmia" at the next meeting.

Drs. Thomas J. Moore, and Hugh M. Taylor, of Richmond, and Meade C. Kemper, of Norfolk, were appointed Examiners on the State Board.

It was voted that the

SEVENTEENTH ANNUAL MEETING

be held in Fredericksburg, during November, 1886.

EVENING SESSION.

DR. BEDFORD BROWN, of Alexandria, presented a paper in continuation of the

DISCUSSION ON SCARLET FEVER.

The speaker dwelt chiefly upon the therapeutics of the disease. He made frequent use in his practice of a formula containing salicylic acid, tincture of aconite, ammonia, and digitalis, and found that it diminished fever more decidedly than any other antipyretic he had ever employed, and acted also as a diaphoretic and diuretic. He deprecated the giving of frequent baths as being too exhausting in adynamic cases. In renal dropsy with engorged kidneys, a full dose of calomel, followed by jalap, would often do good, but when there is a cool skin with pallor, feeble pulse, and great prostration, purgatives are not well borne. Lumbar poultices, digitalis, acetate of potash, and occasional saline laxatives may then be used.

DR. R. J. HICKS, of Casanova, had never, in his thirty years' experience, seen anything indicating a

RELATIONSHIP BETWEEN SCARLATINA AND DIPHTHERIA,

nor had he ever seen scarlatinal throat complications threaten life. He believed strongly in the necessity of an abundance of fresh air in the management of a case of scarlet fever, and said that malignancy was dependent upon bad sanitation, for zymotic germs do not live in pure air but are bred in filth.

DR. ALEXANDER HARRIS, of Jeffersonton, dwelt especially upon the necessity of perfect ventilation and thorough cleanliness. He thought that boiling water or steam was better than the disinfectants in popular use for cleansing the clothes of the patient, or the room in which he has been sick.

DR. C. T. LEWIS, of Clifton Forge, believed in the stimulating plan of treatment, and also in the giving of a liberal supply of nourishing food.

DR. J. T. WINN, of Richmond, agreed with the speakers in their advocacy of sanitary measures. Chloride of lime or corrosive sublimate were the best substances to use in the disinfection of linen and other articles which could not be burned.

DR. L. LANKFORD, of Bowers, thought that malignant scarlet fever would be rarely seen if the importance of pure air were more generally appreciated.

DR. J. HERBERT CLAIBORNE, of Petersburg, related several instances in which individuals had acquired the disease in a mild form after having come in contact with very severe cases, and *vice versa.*

DR. WILLIAM L. ROBINSON, of Danville, was a believer in the efficacy of medicinal treatment. He used baths to reduce the temperature, and allowed his patients to drink freely of lithia water during the course of the disease.

DR. W. W. PARKER, of Richmond, advocated the free use of alcohol in malignant cases, and believed he had saved many cases since adopting this plan.

DR. M. A. WILSON, of New River Depôt, had seen good results from the use of belladonna in throat complications.

DR. HUGH T. NELSON, of Charlottesville, insisted upon the necessity of isolation, even of the mildest cases, in order to prevent the spread of the disease.

THE CHLORINE TREATMENT

of Watson, as described in his work on the "Practice of Physic," was advocated by Drs. Jackson, Thomas, Lewis, Broaddus, Grammer, and Cooper.

DR. M. G. ELBZEY, of Washington, D. C., presented a

REPORT ON CHEMISTRY, MATERIA MEDICA, AND THERAPEUTICS,

reviewing the progress made in these branches during the past year.

DR. S. W. DICKINSON, of Marion, followed with the

REPORT ON OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN,

dwelling especially upon antiseptic midwifery, anæsthesia in labor, neurasthenia, the treatment of uterine displacements, and the therapy of children's diseases.

THURSDAY, SEPTEMBER 17TH—THIRD DAY—MORNING SESSION.

DR. R. T. STYLL, of Richmond, presented the

TREASURER'S REPORT,

showing a balance, after the payment of all expenses to date, of $390.55.

DR. W. D. TURNER, of Fergusson's Wharf, in behalf of the Committee appointed to consider the subject, reported in favor of a petition for the enactment of

A LAW TO REGULATE THE PRACTICE OF PHARMACY.

DR. BEDFORD BROWN, of Alexandria, then read a paper on the

TREATMENT OF LACERATIONS OF THE OS AND CERVIX UTERI WITHOUT SURGICAL OPERATION.

While admitting the advantages of Emmet's operation as a prompt means of relief, though not unattended with danger, there were yet many females, the author said, who were debarred from these benefits and for whom some other method, or none at all must be used. During the past twelve years the writer had treated successfully upward of twenty cases of laceration and fissure of the os and cervix, of varying degrees of severity and some complicated with cellulitis, displacements, subinvolution, etc., by means of local applications alone. The patients suffered from severe neuralgic pains, and in most of them there was more or less impairment of the general health. The writer had seen several cases of laceration in the acute stage heal by first intention after the enforcement of absolute rest and the carrying out of measures of strict cleanliness and disinfection. Warm douches containing borax, boracic acid, and carbolic acid were used gently two or three times a day. If the lacerations did not heal within two weeks they would not heal at all by first intention. In the treatment of old lesions the author had obtained the best results with graduated solutions of nitrate of silver. He applied a solution of thirty grains to the ounce freely to the interior of the cervical canal, and another of fifty grains to the ounce was painted over the whole external surface of the os and cervix until a uniform thick white coating was formed. This coating protects the exposed nerve-filaments, allays inflammation, stimulates the growth of healthy granulations and prevents the absorption of septic matters from the discharges. The solution should be made to penetrate to the very bottom of the fissure in order to ensure success. If hypertrophy and induration of the cervix remain after the lacerations are healed, an application to the external surface is made of a solution of nitrate of silver, 3 ij. to ℥ j. Several of the patients thus treated became pregnant, whereas while the disease existed they were sterile, and being examined after the birth of their children, the cervix and os were found in every case to be normal and entirely free from disease.

Dr. George T. Harrison, of New York, followed with a paper on

PUERPERAL SEPTICÆMIA,

referring especially to its prophylaxis and treatment. The disease, he said, is one that comes from without and cannot gain admittance unless a wound exist somewhere along the genital tract. But the inner surface of the uterus is one large wound, and there are almost always rents in the cervix, vagina, or vulva. In puerperal fever the carriers of infection are either the pathogenous fungi, which generate traumatic diphtheria, pyæmia, and septicæmia, or they are putrefactive germs. The latter are ubiquitous; the former are imported by the hands, instruments, etc. The former affect the organism immediately; the latter indirectly, by their influence on decomposable matters. The principles of prophylaxis consist in pure air for the lying-in-woman, thorough disinfection of the genital tract, and the observance of strict surgical cleanliness on the part of the accoucheur. During pregnancy the woman should frequently wash the external genitals with soap and water, and afterward with a boracic-acid solution. The speaker deprecated the use of antiseptic vaginal injections during labor, unless the patient had been exposed to the possibility of infection, or in tedious and complicated labors during which frequent examinations had to be made or instruments used. All lacerations of the perineum should be closed under strict antiseptic precautions, and iodoform should be dusted over the raw surfaces.

Dr. H. Grey Latham, of Lynchburg, presented the

REPORT ON ADVANCES IN SURGERY,

and Dr. Rives Tatum, of Harrisonburg, the

REPORT ON ADVANCES IN THE PRACTICE OF MEDICINE.

Dr. R. C. Powell, of Alexandria, read a paper entitled

CLINICAL NOTES ON CARCINOMATOUS AFFECTIONS OF THE DIGESTIVE ORGANS,

in which he dwelt especially upon the unreliability of gastric symptoms as evidences of gastric affections, and upon the great value of cachexia as corroborative evidence of malignant disease. He regarded cachexia as a more certain sign of cancer than even the presence of a tumor. There is no specific for the cure of carcinoma, and the treatment might be briefly stated to be the permission of "amusement without excitement, exercise without fatigue, and nutrition without stimulation." The diet should be regulated so as to compensate for the impairment of the digestive function of the organ involved, whether that be the stomach, the pancreas, or the liver.

Dr. M. A. Rust, of Richmond, followed with an exhaustive and interesting paper on

THE ETIOLOGY OF ZYMOTIC DISEASES.

The credit of paving the way for the evolution of the germ theory of disease was due, the writer said, to the botanists and biologists, who, in studying certain epidemic diseases among plants and insects, found that they were always due to the action of some low form of life. Then it was that medical men began to suspect that a similar cause lay at the foundation of the zymotic diseases in higher organisms. The writer then mentioned the different varieties of microbes, and discussed the various theories concerning their origin, their mode of action within the tissues, and the way in which they are finally overcome and eliminated from the organism.

Dr. M. L. James, of Richmond, then read a paper on

DYSPEPSIA AND NEURASTHENIA,

in which he traced the dependence of these two conditions one upon the other, and the evil effects which they mutually exert upon each other, and offered suggestions for the treatment of these distressing affections.

AFTERNOON SESSION.

At this session, when the

REPORT ON ADVANCES IN HYGIENE AND PUBLIC HEALTH

was called for, Dr. Edwards made the sad announcement of the

SUDDEN DEATH OF DR. WILLIAM H. COGGESHALL

in Richmond on September 7th, just after he had completed his paper. At the unanimous request of the Society Dr. Edwards read the report, which was entitled

THE RECENT PLYMOUTH EPIDEMIC AND THE LESSONS IT TEACHES.

The writer showed that the epidemic could be traced to the pollution of a stream, from which the water-supply of the town was obtained, by the dejecta of a typhoid fever patient. No attempt had been made to disinfect these stools. This taught us, he said, the necessity of thorough disinfection of all the excreta of patients suffering from zymotic diseases, and also the danger of allowing habitations to be erected on the banks of a stream from which the water-supply of a community is obtained.

Dr. J. E. Chancellor, of the University of Virginia, then read a paper on the

EVILS OF INHUMATION AND ADVANTAGES OF CREMATION,

the title of which indicates clearly the nature of the article. It was an able plea in support of cremation as a means of disposing of the dead.

Dr. Philip Taylor of Richmond, read a report on

ADVANCES IN OPHTHALMOLOGY,

giving a brief *résumé* of the progress which had been made in these branches of medicine in recent years.

Dr. J. A. White, of Richmond, presented some

PRACTICAL REMARKS AND SUGGESTIONS REGARDING DISEASES OF THE EAR, NOSE, AND THROAT.

He emphasized the necessity of prompt treatment of middle-ear disease, spoke of the influence of puberty and the menopause on otitis, dwelt upon the danger of confounding follicular tonsillitis and catarrhal diphtheria, and mentioned the treatment of hay fever by cauterization of the nasal mucous membrane. His remarks were illustrated with the reports of a number of cases.

Dr. Chas. M. Shields, of Richmond, read a paper on

TRACHEOTOMY IN LUPUS OF LARYNX AND DIPHTHERIA.

He related a case of lupus of the larnyx in a man aged fifty-five, and one of diphtheria in a child aged three, in both of which tracheotomy was successfully performed.

Dr. R. C. Cullen, of Henrico County, sent a communication on

INFANTICIDE,

in which he advocated the enactment of more stringent laws to repress this crime.

Dr. L. Ashton, of Falmouth, read a paper entitled

A PLEA FOR TRACHEOTOMY IN CROUP,

in which he urged the more general performance of this simple operation, believing that by this means the lives of many children could be saved.

EVENING SESSION.

Dr. J. S. Conrad, of Matley Hill Sanitarium, Baltimore, read a paper on the

PSYCHOLOGICAL ASPECTS OF SUICIDE.

Dr. Archer Atkinson, of Baltimore, who was present by invitation, presented a short communication on

IRRITABLE RECTUM.

Dr. Wm. G. Eggleston, of Chicago, reported a case of

GUNSHOT WOUND OF THE HAND.

At the conclusion of this paper, with which the scientific labors of the meeting were concluded, the Society adjourned to the dining-hall of the hotel, where they were entertained at a

COMPLIMENTARY BANQUET,

given by the host, Captain C. A. Colhoun.

AMERICAN GYNECOLOGICAL SOCIETY.

Tenth Annual Meeting, held in Washington, D. C., September 22, 23, and 24, 1885.

(Continued from page 356.)

WEDNESDAY, SEPTEMBER 23D—SECOND DAY—MORNING SESSION.

THE Society was called to order by the President. The following were elected

INVITED GUESTS.

Drs. A. P. Dudley, L. Ernest Neale, Charles H. Riley, Charles O'Donovan, Jr., William E. Moseley, H. S. Bouey, and Joseph B. Plumb, of Baltimore; Dr. J. H. Carstens, of Detroit; Dr. Charles Jewett, of Brooklyn; and Dr. Mary Parsons, of Washington.

THE PRESIDENT called the First Vice-President, DR. William L. Richardson, of Boston, to the Chair, and then delivered

THE ANNUAL ADDRESS.

In the profession of medicine, above all, perhaps, facts are the things which teach, and the intellect, the reason, is the test of truth. The judge who is to discover the truth of complex medical facts and phenomena must be no ignorant prejudiced partisan, biassed by preconceived opinions; but he must be richly endowed with the wisdom of the past, and the rapidly accumulating information of the present, and quick to detect the relations between seemingly dissimilar things. It is not a large number of cases carelessly observed and committed to the treacherous custody of memory, but the comparatively few that are carefully observed, well studied, and honestly recorded, that contribute to establish the great principles of scientific medicine.

Dr. Howard then presented the histories of two rare cases, in which he was unable to make a diagnosis.

CASE I.—S. H——, negress, aged twenty-four years; married; menstruated first at the age of fourteen, which continued regular and normal; was the mother of five children, never had a miscarriage, and her last child was born two months previously. Some days after her last labor she noticed an enlargement of the lower portion of the abdomen, which gradually extended in the median line up to the umbilicus, and was attended by bearing-down pains and frequent micturition. Dr. W. P. Chinn, his chief assistant, detected fluctuation over the entire abdomen, with decided resonance about the umbilical region, and with dulness and bulging in both flanks. Six weeks afterward Dr. Chinn discovered that the umbilical resonance had entirely disappeared, and had been supplanted by dulness, and the umbilicus itself projected forward in the form of a spherical tumor. About two weeks subsequently Dr. Howard saw the patient for the first time, when she had a temperature of 102.5° F.; pulse, 120; respirations, 32. Physical examination revealed pleurisy on the left side. The abdomen was of about the size of that of a woman in the seventh month of pregnancy. There was complete dulness over the entire tumor, unchanged by position, and there was equal fluctuation in every direction. There was no evidence whatever of a solid tumor. The cavity of the uterus measured three and one-quarter inches, and the organ was in front of the tumor.

The President then presented the differential diagnosis relating to ovarian cystoma, fibro-cystoma of the uterus, parovarian cyst, simple ascites, and encysted dropsy of the peritoneum the result of simple peritonitis.

Dr. Howard aspirated the abdominal cyst under antiseptic precautions. The fluid removed coagulated as speedily, and the coagulum was as solid, as that of blood.

After the fluid was removed large hard masses could be felt through the abdominal wall, resembling those felt after tapping a multilocular ovarian cyst, and, according to Atlee, he had to deal with a fibro-cyst of the uterus. But his experience had negatived Dr. Atlee's, and the diagnosis of fibro-cystic tumor of the uterus was again rejected.

The patient rapidly succumbed, with evidence of peritonitis, after the tapping, and the autopsy revealed a case of

ENCYSTED TUBERCULAR PERITONITIS,

which presented the characteristic phenomena of a unilocular ovarian cyst or parovarian cyst.

Dr. Howard then reviewed the literature of tubercular peritonitis, embracing eight cases, in which it could scarcely be said that a correct diagnosis was made in either previous to death.

The second case was that of F. R——, colored, twenty-four years of age, married one year, but never pregnant. General health good, uterine functions normal, no evidence of cardiac or renal trouble. Her abdomen measured, from the ensiform cartilage to the umbilicus, ten and a half inches; from the umbilicus to the symphysis pubis, nine and a half inches; circumference at the umbilicus, forty-six and a half inches; below the umbilicus, forty-seven inches. Distance from the umbilicus to the anterior superior spinous process of the ilium, on the right side, twelve inches; on the left side, twelve and a half inches. The uterus seemed to be pressed forward by a large sac containing fluid, and the sound entered the cavity two and a half inches. The enlargement began about seven and a half years previously, had been free from pain, and gave no special inconvenience to the patient except that which arose from weight and sense of distention.

Microscopical examination of the fluid removed from the tumor in both cases was not resorted to, because Dr. Howard believed that the microscope in the hands of the average microscopist was misleading and untrustworthy. The subsequent history of the case proved it to be one of unilocular cyst, which could not be removed by operation.

The differential diagnosis in this case was studied after the same plan adopted in the first, and also included an extensive *résumé* of the literature of the subject.

The President then returned his thanks to the Society for the honor which it had conferred upon him, and concluded his address with a brief allusion to the "peerless father of American gynecology, J. Marion Sims. It was in this city that he hoped to spend his declining years, and had already made a purchase of a home here for that purpose."

The address was discussed by Dr. T. A. Emmet, of New York, who referred to cases of difficult diagnosis, and also to cases in which great mistakes in diagnosis had been made; by Dr. Busey, of Washington; by Dr. Goodell, of Philadelphia, who thought the President need not be ashamed of having been unable to made a diagnosis until permitted to do so by autopsy; by Dr. Reamy, of Cincinnati, who had a case of death after aspiration of the peritoneal cavity for cystic degeneration of the peritoneum in man, and he also referred to cases of difficulty in diagnosis; and the discussion was closed by Dr. Howard.

THE CARE OF THE PERINEUM DURING LABOR.

DR. THAD. A. REAMY, of Cincinnati, then read a paper on the above subject, in which he said that he who preserves from rupture a perineum which is in peril shows more skill than he who successfully repairs a perineum which has been ruptured. He then referred to the methods which had been recommended for preventing rupture of the perineum, and it was shown that by far the greater number of authorities believed in some method of preservation, and that the method which combined judicious perineal support, with simultaneous re-

tardation of the head, seemed to meet with most favor. The method to be described properly came under the class which combined perineal support and control of the head. It was not recommended in all cases, but only in primiparæ, or in other subjects where the structures were likely to be greatly imperilled.

When the head begins to bulge the perineum, and its distention is such as to indicate peril to its attenuated structures, he places the patient with her back across the bed, with her nates brought to its verge, and takes his seat within easy distance for the necessary manipulations incumbent upon the accoucheur. Then the thighs are flexed upon the abdomen, and the legs upon the thighs, with the knees brought close together, and the limbs are held in this position by two assistants, who may be seated on the edge of the bed, with their backs toward the patient's head; or, if a narrow bed can be obtained, they may take positions on the opposite side of the bed from the accoucheur, which is preferable. These assistants are then given opposite ends of a towel or bandage of linen, about ten inches wide and forty to fifty inches long, which is carried around the buttocks of the patient and spread out smoothly, with its anterior or upper edge on the level of the fourchette. They are then instructed to make traction, during the pains, in such amount and in such direction, and with such part of the bandage as the accoucheur may direct; the direction of the traction may be varied at will, from downward and backward to an upward and forward movement.

The following anatomical and mechanical reasons were given in support of this method of perineal preservation. Recent investigations tend to overthrow the prevailing views concerning the muscles of the perineum (Berry, Hart, and Savage). It has been very generally held that the vagina has a proper sphincter, which is in relation with the sphincter ani by a figure-of-8 continuation, and that there is, just back of the fossa navicularis, a muscular commissure, in the centre of the floor of the perineal body, which also gives attachment to the transversus perinei muscles.

It now seems well established that there is no such fortunate decussation just behind the fourchette; for, if there were, this would be the strongest point of the perineum and not the weakest, as shown by the clinical evidence of its frequent rupture at this point. The firm submucous band felt during parturition at the ostium vaginæ, usually called the constrictor vaginæ, etc., was supposed to be an elliptical muscular ring whose fibres are continuous behind the fossa navicularis. This arrangement of the muscles is taught, and has been, in nearly all of the works of anatomy. Hart shows such a view to have been greatly in error; for, first, the transverse muscles run markedly backward and meet each other at quite an acute angle in the perineal body, and consequently the sphincter vaginæ is not a sphincter at all, but simply a median portion of the two halves of the levator ani as they spread apart and allow exit of the urethra and vagina; these parts of the levator ani are called pubo-coxygeus by Savage. This view of the anatomy is sustained by Cazeaux and Tarnier. Thus it is evident that the median laceration is not required to tear any muscular fibres transversely except a few of the transversei until it reaches the sphincter ani, and in such an injury the skin and fascial fibres only are torn, while the muscular fibres are separated longitudinally.

Suppose two vertical curtains, to use Emmet's simile, whose edges are in contact below and slightly separated above; any attempt to increase the separation at the point of opening by attempting to push a large body between them will manifestly tend to drive them apart below. If this be stayed at the point where they are united below by other curtains below and behind, against the upper edge of which the propelling force is apparently directed, the tendency to separation is greatly decreased. Suppose, in addition, that another transverse curtain is placed over the other two, and, besides, such direction and traction is made upon it as will incline these vertical curtains toward each other we have surely diminished the probability of their separation.

In this method of support the towel properly applied, and the traction successfully directed, plays the part of the third curtain in the illustration, and answers the purpose of a supplemental perineum in practice. It retards the head at the will of the accoucheur by varying the amount and direction of the traction.

This method exerts complete control over the direction of the head, and does not interfere with the use of the forceps or the employment of episiotomy.

The discussion of Dr. Reamy's paper was postponed until the afternoon session.

Afternoon Session.

The Society was promptly called to order by The President.

The discussion was opened by Dr. T. A. Emmet, of New York, who said he had no remarks with regard to supporting the perineum, as he had nothing to do with that line of practice, but wished briefly to give his views regarding the operation for its restoration, and the portion of tissue which he thought was injured whenever the condition called rupture of the perineum existed. In general terms, he held that the perineal body was not ruptured without involving the sphincter ani. First, we should define what the perineum is. If by it was meant all the muscular structure in front of the curve of the rectum, he accepted the definition. Unfortunately, however, the teaching had been otherwise, and that the perineal body was an immense mass of fat, which had nothing to do with the perineum. It is simply the muscular structure in front of the curve of the rectum which should be called the perineum, and when the injury is done it is by the head pushing upon the muscular septum, so that the rectal surface is pushed backward, and the tear is directly behind the entrance to the vagina.

Dr. W. H. Baker, of Boston, had performed Dr. Emmet's last operation since he had been kind enough to describe it to him at the Woman's Hospital, and with very satisfactory results. He regarded it as a very great improvement upon the old perineal operation.

Dr. H. P. C. Wilson, of Baltimore, regarded Dr. Reamy's plan of supporting the perineum as a most rational one, especially as it gave a great advantage to the physician, namely, freedom of his hands for other manipulations.

Dr. M. D. Mann, of Buffalo, thought that Dr. Emmet's recent operation was not applicable to every case of laceration of the perineum; for in some cases there was no tendency to the formation of a rectocele, and there was a direct tear of the structure which exists in front of the rectum. The older operation under such circumstances must be adopted, taking in only the mucous membrane and not the skin, as formerly was done.

Dr. Joseph Taber Johnson, of Washington, referred to one point, namely, the propriety of supporting the perineum at all. Some time ago he had occasion to study the subject, and ascertained as far as possible the effects of parturition upon the perineum, and found that a greater number of cases of rupture occurred among physicians who supported the perineum than among midwives who did not support the perineum.

Dr. James R. Chadwick, of Boston, believed that the term supporting the perineum was a misnomer, and that the various methods described were operative in preventing rupture of the perineum only so far as they retarded the advance of the head.

Dr. Elwood Wilson, of Philadelphia, referred to cases in which he had seen the submucous tissue separated to the distance of one and a half inch before the mucous membrane of the vagina was disturbed at all, and before the head had distended it sufficiently to pro-

duce laceration. In those cases it was utterly impossible to prevent laceration, and the rent extended through the entire perineal body and took place centrally. In such cases he regarded it as impossible to support the perineum so as to prevent rupture.

Dr. J. P. Reynolds, of Boston, thought the statements of women that the perineum had never been ruptured, and that it had not been supported were valueless; for who had examined to determine whether or not rupture had taken place? For many years he had not given the perineum any support except that which came from delay of the advancing head of the child. He advocated the use of anæsthetics.

Dr. Reamy, in closing the discussion, advocated the use of the term perineal support.

Dr. Edward W. Jenks, of Detroit, then reported

A CASE OF CÆSAREAN SECTION,

in which he performed the operation on February 27th last. The woman was twenty-seven years of age, the mother of one child three years old. The case had been reported to the Ontario Medical Association by Dr. J. L. Bray; he was also aided in the operation by Drs. O'Keith and Allen. Three years ago the patient received an accident which fractured the right ilium and produced a deformity of the pelvis which eventually caused her death. Nothing external was seen, and not until an attempt to apply the forceps was made, was the deformity detected. There was a wall of bone on the right side of the pelvis, forming a shelf-like process upon which the fœtus rested. Attempts to deliver with the forceps had failed, and craniotomy had been performed before he saw the case. He deemed it unfortunate that so much manipulation had been made before Cæsarean section was resorted to. The operation was performed in the usual manner, and the patient rallied well. The temperature was normal, the pulse 120, and she was doing well, when on the third day after the operation she died suddenly. He subsequently learned that the patient had a bad dream, and found herself standing upon the floor, and when she was placed in bed she said that she felt as if something had given way inside, and died at the end of about three hours. No autopsy could be obtained.

The paper was discussed by Dr. Skene, of Brooklyn.

Dr. Elwood Wilson, of Philadelphia, then read a paper on

THE USE OF TARNIER'S FORCEPS,

in which reference was made to the protest which he entered to the use of Tarnier's forceps at a previous meeting of the Society. Having, since that discussion, had nine cases suitable for the use of Tarnier's instrument, he renounced before the Society his unjust condemnation of the forceps, and briefly narrated their histories. He offered a few reasons for his change of conviction, and finally believed that no man should condemn on theoretical grounds an instrument in the use of which he had not had practical experience. The modification of Tarnier's forceps devised by Dr. Howard, of Baltimore, was the instrument which he employed in the nine cases, and there was no laceration of either the cervix or perineum.

He thought the instrument applicable in all cases of narrowing of the pelvis, either at the superior strait or at the outlet, and that for all applications of forceps at the superior strait this instrument should be used in preference to Osiander's method of delivery, or in preference to resorting to the dangerous expedient of podalic version; and that they should be applied, if possible, to the sides of the child's head; but, if not, they might be applied obliquely.

The paper was discussed by Dr. Neale, of Baltimore; Drs. Parvin and Goodell, of Philadelphia; Dr. Mann, of Buffalo; Dr. Wilson, of Baltimore; Dr. Reamy, of Cincinnati; and by the President.

THURSDAY, SEPTEMBER 24TH—THIRD DAY—MORNING SESSION.

The Society was called to order by the President.

Dr. R. Stansbury Sutton, of Pittsburg, read a paper entitled

A MODIFICATION OF EMMET'S CERVIX OPERATION IN CERTAIN CASES.

Dr. Sutton reported a case, and said that cicatricial tissue in variable quantity occupies every lacerated cervix of long standing. So long as this tissue is limited to the angle of the laceration it is in small quantity; but the cicatricial tissue is often deposited in larger quantity in the lips of the laceration frequently from border to border. In all these cases, says Dr. Emmet, "were we to simply freshen the surfaces in a superficial manner and attempt to bring them together we should fail to approximate the outer edge properly. Besides, this tissue is cicatricial, is dense, and were we to succeed in obtaining union it would be only temporary, because the previous condition will be reproduced from want of vitality. It is necessary to remove this tissue from the cervix before attempting to secure union. But the removal is not to extend entirely across the flap, because there would be in that case complete closure of the cervical canal."

Dr. Sutton's modification applied to the treatment of those cases in which one flap was involved, and which might be treated by simple denudation with some excavation, while the other flap was so involved that it was necessary to denude its entire face.

In the case reported the anterior lip was longer than the posterior. Ordinary denudation of the posterior lip was sufficient, but the anterior lip required denudation entirely across, and the cicatricial masses removed were exhibited, which extended from below as high as the internal os and from border to border. The lips were then united as usual, and the result had been excellent, the patient having menstruated twice without pain.

Dr. William Goodell, of Philadelphia, said he had resorted to this deviation from the Emmet operation on more than one occasion.

There was another thing he had done in one or two instances, that is, he had dissected up the ribbon of mucous membrane, leaving it attached to the margin of the lip, and then removed the cicatricial tissue beneath it. In the cases in which he had performed this operation there was a very good os, although it was a little smaller than he would have preferred to have had it. He would also state that it had been his rule to dissect out the Nabothian glands so as to get a good surface.

Dr. A. J. C. Skene, of Brooklyn, criticised the use of the term cicatricial tissue, and was confident that it was not cicatricial tissue, but simply hyperplastic tissue, which produces sclerosis. He was also inclined to think that the cicatricial plug, of which so much had been said, in the angle of the original laceration had been magnified.

With reference to the mode of disposing of it, he believed much could be done by preparatory treatment; but sometimes the cervix was so large that too much time would be required to reduce its size in this manner, and then the modification of Dr. Sutton might be adopted. Certainly all diseased Nabothian glands should be disposed of, if possible, before the operation for closure of the laceration. And he thought it better to puncture these cysts during the preparatory treatment.

Instead, however, of doing as Dr. Sutton suggests, he performs an operation as a part of the preparatory treatment, which consisted in removing a V-shaped piece and introducing a couple of sutures on each side of the os externum, and allow the stitches to remain until union takes place, the patient being able to go about after the first day. At the end of a week or ten days remove the sutures, always using silk. Then when the enlarged cervix had been reduced, perform the ordinary operation.

Dr. Elwood Wilson, of Philadelphia, had denuded the entire anterior and posterior lips, and then introduced

a little pledget of lint, allowing it to remain twenty-four hours, and the results had been very satisfactory. He had had undue contraction after the operation in only two cases.

Dr. G. J. Engelmann, of St. Louis, said that Dr. Sutton's modification had thrown new light on this subject. He had encountered the difficulty of which Dr. Sutton had spoken, and, early in the history of the operation had endeavored to overcome it by paring the surfaces, so to speak, whereas he now cut deep and removed a piece, and had frequently found it impossible to preserve the strip of mucous membrane. At first he had a complete agglutination of the entire surface, but the introduction of a probe on the third or fourth day, and again on the eighth or ninth day, had kept the passage open, and during the last few years he had paid no attention whatever to the central strip.

Dr. J. Taber Johnson, of Washington, thought the Society indebted to Dr. Sutton for the point brought forward, although it had been practised by others, yet had not been published. He had had the same trouble referred to by other speakers in treating the undenuded portion, it being unhealthy and covered with a peculiar condition of the mucous membrane. He removed it in one case, and had considerable difficulty in keeping the pledgets of cotton in position, introduced for the purpose of preserving the integrity of the canal.

He wished, in connection with this subject, to make a public statement with reference to statistics which he published some time ago concerning the danger of Emmet's operation, and in which he feared he had done injustice to the statistics furnished him by Dr. Goodell, of Philadelphia. He had added three to the list of fatal cases, taken from Dr. Goodell's statistics, but had since learned that those deaths were not in any way traceable to the operation.

Dr. M. D. Mann, of Buffalo, said there were several classes of cases which came into the discussion of this subject. Ordinarily the anterior lip was very much hypertrophied, and the posterior was normal or even slightly atrophied. In this case it was difficult to bring the two lips together, and Dr. Emmet's method was to cut into the anterior lip somewhat deeper toward the front part, making the flap long, then bringing the lips together. Dr. Mann had tried that method with good results. He had also tried the method suggested by Dr. Sutton, cutting tissue out of the anterior lip until it was reduced in size so as to correspond with the other lip, and then bringing them together, and it had given very good results. He had not encountered any case in which contraction, such as spoken of by Dr. Skene had occurred.

With regard to Dr. Engelmann's statement, that he cuts very deeply in some of these cases, Dr. Mann would be afraid to do so because of the tendency to uterine version, and if all of the cervix were cut away there would not remain any handle by which the uterus could be kept in proper position by means of a pessary. The plan, however, might give better results than it would seem to do theoretically.

Dr. Goodell, of Philadelphia, was very much obliged to Dr. Sutton, and also to Dr. Johnson, for reference to his cases, and then gave briefly the clinical histories of the three cases referred to by Dr. Johnson in his paper. As already stated, one patient died from the effects of the ether. In the second there was found a gummatous tumor at the base of the brain, and the third died from causes entirely independent of the operation.

He would ask Dr. Sutton if he had ever seen any cases of retroversion, as he had seen, cured by Emmet's operation?

Dr. W. H. Baker, of Boston, thought it hardly fair to regard as a modification of Emmet's operation the procedure which Dr. Sutton had described, as it was rather giving up the fact that Emmet's operation could be or could not be performed in any given case, and going back to the performance of partial amputation of the cervix. It seemed to him that if Dr. Sutton's proposed modification was adopted, the result would be a curved canal. If the patient is thoroughly prepared before the operation, and if these hyperplastic lips remain greatly enlarged, it becomes a question whether we can perform Emmet's operation, and whether we can approximate the opposed surfaces and bring them into perfect apposition. Dr. Baker believed that it could be done in every case. He thought it could be done exactly as Dr. Skeene had described, except that he would not agree that it was necessary to perform it as a preparatory operation; for as a preparatory operation a much larger V-shaped portion must be removed in order to approximate the surfaces.

Dr. Engelmann remarked that the involution of the uterus after these operations was much more marked when a large portion of the indurated surfaces was removed than when the cervix was simply trimmed, and that it was the final result which should be aimed at much more than simple union of the surfaces.

The President referred to the fact that it was Dr. Sims' mode of practice to remove a large portion of the hyperplastic tissue and insert a small glass tube, fitting so lightly that it would drop out if not sustained by a cotton tampon, and which was renewed every day until it was no longer necessitated.

Dr. A. P. Dudley, of Baltimore, an invited guest, said that it was Dr. Emmet's custom, when one lip was very much more hypertrophied than the other, instead of leaving the angle where it is, to change the angle of the laceration upon the other lip, whichever was the longest, and thereby do away with the necessity of cutting out a strip.

Dr. Skene further remarked that when denudation entirely across the flap was practised upon both sides, stenosis would sooner or later occur. He was in favor of leaving the mucous membrane upon one side at least, and if possible upon both. He believed with Dr. Baker that the aim of the surgeon should be to preserve, as far as possible, the original cervix, and that the abandonment of Dr. Emmet's operation and practising amputation was not by any means the highest art; it was simply a deviation which might become necessary.

Dr. Sutton, in closing the discussion, accepted the criticism, with reference to the term cicatricial tissue. With reference to the cure of retroversion by operations upon the cervix, he had observed it in his practice.

INFLAMMATION OF THE PAROTID GLANDS FOLLOWING OPERATIONS UPON THE FEMALE GENITAL ORGANS.

Dr. William Goodell, of Philadelphia, read a paper on the above subject, in which he gave the histories of cases which seemed to him to give evidence of the sympathetic relation existing between parotid bubo following operations upon the female genital organs. Schroeder had reported five cases of parotid bubo, with two deaths in two hundred cases of ovariotomy. In one hundred and fifty-three ovariotomies performed by himself, one case of parotid bubo had occurred, of which he gave the history. These were cases of symptomatic parotid bubo, but he believed that there were other cases sympathetic, and not septic in character, as there was no evidence of septicæmia, and the swelling did not suppurate. Of these he gave an illustrative case, which had already been reported in the *American Journal of Obstetrics*.

In his third case both glands were involved, following oöphorectomy, and this was reported in the Philadelphia Obstetrical Society, October, 1884. Since that time his observations had been confirmed by Angus McDonald and others, that the condition was one of sympathy and not symptomatic; that there was a kinship between the adult genital apparatus and the parotid gland, and that the existence of the two conditions was something more than a mere coincidence.

Dr. Sutton, of Pittsburg, referred to a case of ovariotomy occurring in his own practice, in which the parotid glands became inflamed, did not suppurate, but the patient died.

Dr. J. Taber Johnson, of Washington, referred to a case of ovariotomy in which his patient died on the sixth day after the operation, with a slight rise of temperature, glassy expression of the eye, and an inflamed parotid gland, but no suppuration.

Dr. M. D. Mann, of Buffalo, wished to put on record three cases of this complication. In one there was distinct septicæmia, and the patient died before suppuration of the gland took place. In the second the parotitis appeared after removal of both ovaries and the uterus, the patient recovering, and the third case occurred after a wound of the abdomen in a man. He had regarded the complication as one which might follow abdominal wounds rather than wounds referred distinctly to the sexual organs.

Dr. T. A. Emmet, of New York, added to the list two cases; one following the operation for laceration of the cervix, and the other following the operation for closing an insignificant vesicle over a vaginal fistula. In the last case the patient died, it being the only case in which he had ever known a patient to die after the operation for vesico-vaginal fistula. He had not seen it after ovariotomy.

Dr. Baker, of Boston, added one case, which occurred after Tait's operation. There was suppuration of the left parotid gland, thought to be of septic origin, but the patient ultimately recovered.

Dr. Reamy, of Cincinnati, had seen two cases of inflammation of the parotid gland after operations. The first was after Tait's operation, in which the patient died, and the gland did not suppurate. The second was one of supravaginal hysterectomy after removal of both ovaries and the tubes, in a woman fifty-four years of age. The left parotid gland was very much enlarged, but did not suppurate, and the patient, after a long time, recovered.

Dr. Goodell said that it was well known that parotid bubo might follow surgical operations, and such diseases as typhoid fever, scarlet fever, etc.; but the point in his paper he thought had been sustained by the cases related by the gentlemen who had taken part in the discussion. The complication is exceptional after surgical operation, but he thought it was more apt to occur after operations upon the sexual organs, and he could not help but think that some of them were entirely free from septic poisoning. If the temperature does not rise, and the pulse does not show much sympathy, he should regard the disease as sympathetic, and would not worry concerning the case as he had done formerly.

Dr. James R. Chadwick, of Boston, read a paper entitled

PERISTALSIS OF THE GENITAL TRACT,

and related the histories of two cases in which the question arose, Why should contractions of the womb lead to relaxation of the vagina? The problem was one of physiology, not of physics; for in neither instance was there any mechanical distention. An elucidation of this law he believed might be obtained by analogy with other organs having similar structures and functions. Dr. Chadwick then referred to his paper on the so-called functions of the anal sphincter and the act of defecation, in which he made the point that this physiological act applied equally well to the so-called third sphincter and the internal sphincter which contracted behind the anal sphincter, and acted, not as a sphincter, but as *detrusor es fecium*, a view that has met with general acceptance.

With reference to the *bladder*, Dr. Chadwick had observed that in cases of irritable neck pressure upon and irritation of the full bladder, through the abdominal wall, had, in certain cases, failed to cause evacuation of the urine until peristaltic action had been set up in the walls of the bladder, as was manifest to the touch through the abdominal walls. Peristalsis in these two organs does not take place in identically the same manner, but differs to meet the special requirements.

In the *intestines* there seems to be contraction of the muscles throughout the entire circumference of one segment of the tube during a brief period of time.

Each form of peristalsis is specially adapted to the different character of the contents of each viscus.

Dr. Chadwick then presented the grounds for attributing an analogous function to the genital tract. The Fallopian tubes, uterus, and vagina must be considered as one tube; the walls of all three consist mainly of two layers, arranged, one longitudinally and the other transversely, the disposition being the same as in the bladder and intestines; the muscles are unstriped as in the other organs, and the contractions of these muscles also are under the influence of the spinal and ganglionic system of nerves, and occur rhythmically. Those of the vagina in woman have not been hitherto observed or recorded, but may from analogy be supposed to follow the same law. Or, if to a certain extent the theory has been recognized, its importance has not been adequately appreciated. Dr. Chadwick then referred to the literature of the subject, and believed that he had established a presumption in favor of the explanation of the vaginal relaxation, and would insist that peristalsis is the normal mode of action of each and every division of the genital tract, and that many phenomena and many symptoms can only be correctly interpreted by reference to this mode of motion. Vaginal colic must be rare, yet its assumption would also explain the peculiar symptoms in two or three cases which he could recall. Tubal colic, in various degrees, he believed to be of very common occurrence, but not easily demonstrable. He believed it to be the true morbid phenomena which gives rise to most of the lancinating pains which are usually denominated ovarian neuralgia.

The paper was discussed by Dr. Goodell, of Philadelphia.

Dr. Theophilus Parvin, of Philadelphia, then read a paper on

FACIAL PARALYSIS IN THE INFANT FROM THE USE OF THE OBSTETRIC FORCEPS.

Dr. Parvin related the history of a case occurring in a primipara thirty years of age, who had chronic Bright's disease. The presentation was vertex, the position left occipito-anterior. Davis's forceps were used, and a living child, feeble, weighing seven and a half pounds, was delivered. On the following day, when the child cried the right side of the face presented the usual appearance of facial paralysis; but it scarcely interfered with nursing, and at the end of ten days had disappeared without treatment. Not all cases, however, terminate in recovery.

Dr. Parvin then gave a *résumé* of the literature of the subject. The average period of recovery after forceps delivery is six weeks. Cases also occur spontaneously, and in practice they are to be differentiated. In the great majority of cases the condition is due to compression of the seventh pair nerves.

With regard to treatment, nothing is to be done in the first few weeks. Later, electricity, counter-irritation, etc., have been resorted to. We should be cautious, however, concerning prognosis; probably it will recover spontaneously, and treatment should be begun after the expiration of two months, if recovery has not then taken place.

Dr. Elwood Wilson, of Philadelphia, had seen this result from the use of forceps in a number of cases; he had no recollection of its spontaneous occurrence. He had never seen it after prolonged, hard labors *unaided*. He thought he had seen it most frequently where the head of the child presented in the right side of the pelvis, and that it had been due to a failure to carry the forceps sufficiently high upon the child's head.

Dr. Goodell, of Philadelphia, said that in every case in which he had seen it the paralysis had been upon the right side of the face, and he had not seen it in *unaided* labors.

Dr. Skene, of Brooklyn, had been interested in the question of differential diagnosis between cases of spon-

taneous origin and those following the use of, and probably due to, pressure of the forceps. As a rule, there was but little difficulty, except in a complication consisting of paralysis of the facial nerve with paralysis on the same side of the face and arm produced by injury in delivering the shoulder. In other words, it is difficult to differentiate between paralysis produced by injury done by forceps and the paralysis which often occurs, in tedious labors, from apoplexy.

DR. RICHARDSON, of Boston, said that all the cases which he had seen had recovered spontaneously within three weeks, and that the paralysis had in nearly all been upon the right side. He had seen two cases in which it followed the use of forceps to complete delivery after version.

DR. PARVIN thought the histories of the cases he had given, and the remarks which had been made, confirmed the suggestion that it is that side of the face which is lower, the head descending somewhat obliquely, that is most liable to be compressed.

A paper on "The Genu-pectoral Position in the Prolonged Nausea and Vomiting of Pregnancy," by Dr. Henry F. Campbell, of Augusta, Ga., was read by title.

DR. JOSEPH TABER JOHNSON, of Washington, offered a resolution extending the sympathy of the Society to ex-President Albert H. Smith, of Philadelphia, in his sickness, attended with unusual suffering, and expressing the hope that he might be speedily restored to health.

Seconded by Dr. H. P. C. Wilson, of Baltimore, and unanimously adopted.

The retiring President then called to the chair the President-elect, Dr. Thad. A. Reamy, of Cincinnati, O., who thanked the Society for the great honor it had conferred upon him, and promised to work honestly and with his whole ability for its continued prosperity.

On motion by Dr. Wilson, of Baltimore, the thanks of the Society were unanimously voted to the retiring President for the faithful and impartial manner in which he had discharged the duties of his office.

On motion by Dr. Goodell, of Philadelphia, the Society unanimously returned its thanks to the late Secretary, Dr. Frank P. Foster, of New York, for the able manner in which he had performed his duties, and expressed the regret that he was no longer able to accept the office.

On motion by Dr. Richardson, of Boston, the Society adjourned to meet in Baltimore, September 21, 22 and 23, 1886. The following were elected officers for the years 1885 and 1886:

President—Dr. Thad. A. Reamy, of Cincinnati.

Vice-Presidents—Dr. Theophilus Parvin, of Philadelphia, and Dr. George J. Engelmann, of St. Louis.

Secretary—Dr. Joseph Taber Johnson, of Washington.

Treasurer—Dr. Matthew D. Mann, of Buffalo.

Council—Drs. Frank P. Foster, of New York; B. B. Browne, of Baltimore; John C. Reeve, of Dayton, O.; and R. B. Maury, of Memphis, Tenn.

The following were elected to active fellowship: Dr. James B. Hunter, of New York; Dr. Charles Jewett, of Brooklyn; and Dr. W. H. Parish, of Philadelphia.

Dr. W. S. Playfair, of London, England, was elected an honorary fellow.

THE CAREFUL PATIENT.—The following joke is at the expense of a Chicago doctor. He was about to anæsthetize a patient, when, in answer to a question, he informed the victim that he would be entirely unconscious and know nothing until the offending growth had been removed. The patient accordingly commenced to fish his loose change out of his pocket. "Oh, you need not mind the fee until I am through," remarked the considerate doctor. "I don't intend to pay you yet," returned the patient, "I wish merely to count my money, to see how much I have." The doctor saw the point and was much amused.

Correspondence.

OUR LONDON LETTER.

(From our Special Correspondent.)

THE COURSE OF STUDY IN THE LONDON MEDICAL SCHOOLS NOW AND TWENTY-FIVE YEARS AGO.

LONDON, September 15, 1885.

IN another fortnight the medical schools will reopen, and the various medical and scientific societies will not be long in imitating their example. By the first of October, also (that day sacred to introductory lectures), most doctors who have been away to recruit themselves will have returned for the winter. By the time this appears in your columns, therefore, medical London will have reassumed its normal activity.

The curriculum of the London medical student differs in some respect from that of his American confrère in New York, Boston, Philadelphia, or other medical centres in the United States. That it is different from that of most Continental schools, goes without saying, though it is equally obvious that there must be some resemblance between all well-equipped schools of medicine. Dublin and Edinburgh, and the other Scotch and Irish schools, have each their own peculiarities on which I do not now propose to dwell. I will briefly describe the ordinary course of study in one of the metropolitan medical schools, merely premising that my account does not apply to any one medical school in particular, but to metropolitan medical teaching in general. With a few variations it may be taken as applying to most of the provincial medical schools also.

The minimum course of study for all diplomas and degrees now consists of four years. Each *annus medicus* at a medical school is divided into two sessions, viz., a winter session (October 1st to March 31st, with a vacation at Christmas), and a summer session (this begins May 1st and terminates from the 15th to the 31st of July, according to the school). Of this period of four years, at least three winter sessions and two summer sessions must be passed at a recognized medical school; the remainder of the time may be spent in pupilage with a medical practitioner or otherwise. For the higher examinations the whole period of four years must be spent at a medical school. For its Fellowship, the College of Surgeons requires a curriculum of six years, except from candidates who have been eight years in practice. The University of London requires a preliminary year to have been spent in the study of science, and the General Medical Council have lately advised that this plan should be adopted by all students. It is scarcely necessary to remark that candidates for the more difficult examinations often voluntarily lengthen their curriculum beyond the minimum of four years, and that students who only purpose going in for the ordinary diplomas may have it (involuntarily in their case) lengthened for them by failure at one or more examinations.

On entering at a medical school a student has to register himself as a medical student at the office of the Medical Council. Before being allowed to register he has to produce a certificate of having passed a recognized examination in the subjects of general education. He then commences his studies. Most students commence medical study in October, though some prefer to begin with the summer session, and the number of those who do so is apparently increasing. During the first two winter sessions, anatomy and physiology (including histology) form his chief subjects for study. During his first winter, however, he has also to attend lectures on chemistry, and during his second, courses of lectures on medicine and surgery. Anatomy is studied by means of lectures, practical demonstrations, and dissections. During his first two winters an average student generally manages to dissect the whole body once, and, if industrious, can generally contrive to do some parts twice.

Bodies for dissection are now always injected, and some preservative fluid (mixed with some coloring matter) is usually employed for the purpose. At many schools the students still further preserve their "parts" by wrapping them up in cloths dipped in methylated spirit or carbolic lotion—a piece of mackintosh being placed round this to prevent evaporation. In some of the dissecting-rooms, though, the dissectors make no attempt to check putrefaction, but when their "part" has gone bad, get another. Histology is taught by means of practical demonstrations. Physiology is taught mainly by means of lectures, though there are classes of practical physiology (apart from histology) at some schools, and a few have well-equipped physiological laboratories for study and research. Still, instruction in practical physiology is far from being as thorough as is that in practical anatomy. Take, for instance, the chemistry of the urine. At some schools, at any rate, the average student makes his first *practical* acquaintance with this subject when he comes to his clinical work. Still, improvement is going on in methods of instruction, and physiology is not only farther advanced, but is taught much more thoroughly than it was five or ten years ago. An elementary examination in anatomy and physiology has (according to the new Conjoint scheme) to be passed at the end of the first winter session.

The first summer session is devoted to the attendance on lectures on materia medica and botany, and to the practical study of chemistry in the chemical laboratory. The ordinary course of practical chemistry includes the detection of the inorganic acids and bases, and the use of the blowpipe. General chemical manipulation is taught, and, in some schools, the practical preparation of gases, etc. Most schools now have a voluntary advanced class for studying practical organic chemistry. The materia medica museum is usually frequented during the first summer session, and also the hospital dispensary, to learn dispensing, unless this has previously been learnt. At the end of the first summer (or sooner, if he can produce certificates of having received instruction in the subjects) the student can present himself for examination in chemistry and physics, materia medica and pharmacy, and medical botany.

During the second winter anatomical and physiological work is pursued with redoubled zeal, in view of the examination which should be passed at the end of the winter session. As the latter draws near, special classes are usually held to prepare for the coming ordeal, and at some schools it has been customary to refuse the necessary certificates of attendance to students who have not satisfied their teachers of their proficiency. At no metropolitan school, however, so far as I am aware, are the dissecting-rooms open after 5 P.M. Evening instruction of any kind, except in private classes, is unknown in the London schools.

Having passed his examination in anatomy and physiology the student is now at liberty to turn his attention to clinical work, of which he has hitherto seen little or nothing. He may have paid an occasional visit to the wards and had stray glimpses of the operating theatre, but his attention has been almost entirely monopolized by the earlier subjects. If he be going in for the F.R.C.S. he must pursue these for yet another year; and if he intend presenting himself for the London University examinations he will frequently elect to devote an extra year to anatomical and physiological studies conjoined, in the latter case with materia medica and chemistry. In either of these cases he will defer clinical study for the present. Presuming, however, that he is merely going in for the ordinary diplomas, his second summer session will see his introduction to the wards. During this session he will have also to attend lectures on midwifery and medical jurisprudence, but these will not absorb much of his time. During these three months an attentive student can pick up a good deal of clinical knowledge. A dressership in the out-patient department is often held at this time.

During the third winter session lectures on medicine, surgery, and pathology are attended. Clinical work is now attacked in good earnest. Some hospitals have medical tutors attached to them, whose duty it is to impart elementary clinical instruction to students preparatory to their appointment as clinical clerks and dressers. At others, students are sent straight into the wards and left to learn what they can. In the latter case, they usually get some elementary instruction from the house-physicians and house-surgeons. At some hospitals the post of surgical clerk is conjoined with that of dresser; at others it is a separate post. Three or four months is the usual period for which these clinical appointments are held, though a second or third term may sometimes be obtained. The facility with which dresserships and clerkships can be obtained varies considerably at different hospitals, depending partly on the size of the hospital, and partly on the number of students. Clinical appointments are free at most hospitals; at others they have (some or all) to be paid for. Out-patient appointments sometimes precede, sometimes follow, in-patient ones. At Guy's Hospital the in-patient dresserships are usually held by students who have obtained their diplomas, and they take almost entire charge of the cases, the duties of the house-surgeons being confined to the maintenance of a general supervision and the administration of anæsthetics. Clinical appointments can be held in the various special departments, which are now very numerous.

Midwifery cases have often been attended during a period of preparatory pupilage, though this method of commencing medical study is decidedly on the wane. Some students get some insight into midwifery practice while holding temporary assistantships during vacations. Those who have not had any midwifery practice can get cases assigned them in the maternity department of their hospital. At some hospitals (*e.g.*, the London and St. Thomas') arrangements are made for the obstetric clerks to reside in the hospital during their fortnight on duty; at others they are summoned from their lodgings.

At the conclusion of his fourth year of study the student can present himself for his final examination in medicine, surgery, and obstetrics, including pathology and therapeutics. This is partly written, partly *viva voce*, and partly clinical and practical. The three subjects may be taken either together, or, if wished, singly.

Many changes have taken place in the curriculum within the last quarter of a century. Twenty-five years ago the curriculum was only three years, and there was only one examination for the membership of the English College of Surgeons. This only occupied an hour, and was entirely *viva voce*. Practical examinations in anatomy and histology, and clinical examinations in medicine and surgery, with questions on morbid specimens are all modern innovations not only at the College of Surgeons, but elsewhere.

SHALL WE FOLLOW ONE LINE OF TREATMENT OF GUNSHOT WOUNDS?

To the Editor of The Medical Record.

SIR: In THE RECORD of September 12th there appears an article of seven pages on the above subject. The writer of it has not had that extensive experience that we should have desired in such an article; but, perhaps, to the readers this is a gain, as he does not thus prejudge conclusions with special treatments of his own, simply chronicling the very extended lines of experience of the distinguished European military surgeons in recent wars; therefore the article is, to a certain extent, instructive.

The author evidently favors, generally, primary antiseptic occlusion. Casting aside personal predilections as to this or that special way of treating, we see that success is recorded, by means of diametrically opposite treatments, in the careful hands of distinguished authori

ties. It is also well known generally that wounds, in their after-behavior, must be classified in at least two large divisions. With what reason, then, can the writer favor a treatment to be generally pursued which can only be followed in one of these divisions?

Like many other medical practitioners, doubtless, I have slowly and carefully read works on military surgery written by celebrated authorities; also similar articles in the medical press. I think the more we read on this subject, the more convincing it is that certain wounds require one treatment, while other wounds require other treatments.

A dogmatic assertion that nearly all wounds can be brought to a successful issue by simply applying an antiseptic dressing, whether in the hands of a nurse, office-boy, or doctor, letting everything else take care of itself, we opine is untenable. The idea that down in the depths we can leave a heavy Remington bullet, crushed bone, crushed muscle, lacerated and crushed arteries, leave them with complacency, and put a carbolized rag over the outside hole or holes, is a pleasant one to the surgeon. A chest-wound has usually been regarded as serious, as well as cranial wounds; but remarkable results have been obtained in both instances by drainage; good results are also had by leaving alone; this is where a good surgeon is expected to use his judgment, and not merely an antiseptic rag.

With regard to abdominal and pelvic wounds, the case is widely different. As a preliminary remark, a limited number of wounds of these cavities by both bullet or blade have recovered. But we think the indication undoubtedly should be to perform laparotomy; if the ball is not soon found, it may be left, as it will likely do little harm. The chief danger consists in intestinal wounds; their edges should be freshened, then brought together in the manner practised by Dr. Bull, of this city; severed, or even brushed, vessels should be tied, as a brushed vessel, under inflammatory reaction, may cause serious secondary hemorrhage, imperilling the success of the whole operation; finally, drainage may, or may not, be employed.

A small effusion of simple or of bloody serum will not imperil the patient. Dr. Raymond thinks that a pint of bloody serum is serious; a pint of fluid spread out in the abdominal cavity would make very little show. There are many cases of effusion in peritonitis and in pleurisy where the patients have recovered after the effusion of more than a pint.

Statistics are often delusive for many side-reasons: post-mortems, unfortunately, are often delusive from the imperfect diagnostic powers of those who perform them; the dead body is there as convincing but silent evidence, but the correct diagnosis is not there.

The correct treatment of wounds has been carefully considered from the time of Hippocrates, down through the Middle Ages to the recent times of Larrey, Guthrie, Langenbeck, and Esmarch; in the way of occlusion Larrey (when it was proper to do so) employed a gently stimulating compress of wine and white of egg; while Richardson, of London, has obtained excellent results with his "styptic colloid."

Thus we see it is eminently proper that we should not follow only *one* line of treatment.

C. E. Nelson, M.D.

109 East Thirty-fifth Street.

Reproduction of Harvey's Original Lectures.—The transcribing and reproduction of Harvey's original MS. lectures, delivered before the Royal College of Physicians in 1616, containing the first suggestion of his discovery of the circulation, are proceeding uninterruptedly under the active supervision of Mr. Scott, of the British Museum, the *fac-simile* work being entrusted to the Autotype Company. The cost to subscribers is fixed at two guineas, and the work is expected to be ready for delivery in the spring of next year.

Army and Navy News.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from September 20, 1885, to September 26, 1885.

McParlin, T. A., Lieutenant-Colonel and Assistant Medical Purveyor. Promoted to be Surgeon, with rank of Colonel, to date from September 16, 1885.

Irwin, B. J. D., Major and Surgeon. Promoted to be Assistant Medical Purveyor, with rank of Lieutenant-Colonel, to date from September 16, 1885.

Pope, B. F., Captain and Assistant Surgeon. Promoted to be Surgeon, with rank of Major, to date from September 16, 1885.

Morris, Edward R. Appointed Assistant Surgeon, with rank of First Lieutenant, to date from September 17, 1885.

Ainsworth, F. C., Captain and Assistant Surgeon. From Department of Texas to New York City, for duty as Recorder of the Army Medical Examining Board. S. O. 214, A. G. O., September 18, 1885.

Adair, G. W., Captain and Assistant Surgeon. Granted leave of absence for one month, with permission to apply for one month's extension. S. O. 104, Department of Dakota, September 18, 1885.

Shannon, Wm. C., Captain and Assistant Surgeon. Granted leave of absence for four months, to take effect about October 1st. S. O. 215, A. G. O., September 19, 1885.

Bushnell, Geo. E., First Lieutenant and Assistant Surgeon. Ordered from Department of Dakota to Department of the East. S. O. 219, A. G. O., September, 24, 1885.

Official List of Changes in the Medical Corps of the United States Navy for the week ending September 26, 1885.

Dungan, J. S., Medical Director. Waiting orders.

Medical Items.

Epidemic Pneumonia.—S. Triwus, a district medical officer in St. Petersburg, communicates to that *Vrach* an account of an epidemic of pneumonia in the city. From April 26th to May 17th, out of 133 patients seen by him 23 had croupous pneumonia (17.2 per cent. of the whole). In one dwelling there were 3 cases, in another 2; in one house there were 4, in another 3, and in two 2 cases. Sixteen of the patients lived in houses with gardens.

Teacher: "So you can't do a simple sum in arithmetic. Now, let me explain it to you. Suppose 8 of you have together 48 apples, 32 peaches, and 16 melons, what will each one of you get?" "Cholerer Morgus," replied little Johnny Fizzletop, who is addicted to that malady.—*Texas Siftings.*

The Relative Fatality of Charcoal Fumes and Illuminating Gas.—Drs. Biefel and Poleck have recently discussed in the *Zeitschrift für Biologie* the question of the relative fatal effects of charcoal fumes and of illuminating gas, it being asserted that in the former case .19 per cent. in the air of CO destroys human life in thirty-five minutes, while a limit of one per cent. is exceeded in the latter case before a similar result ensues. This is attributed to the presence of oxygen in the gas; but Dr. Wagner has disputed these conclusions on the ground that the experiments were not conducted in a satisfactory manner. He agrees, however, with the statement that a mixture of gas and air possessing fatal properties is necessarily in an explosive condition.

Another Cure for Hiccough.—A writer in the *Bulletin Générale de Thérapeutique* says that refrigeration of the lobe of the ear will stop hiccough, whatever its cause may be. Very slight refrigeration, such as a drop of cold water, is said to be sufficient.

The Medical Record

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Original Articles.

WOUND OF THE BASILAR PORTION OF THE BRAIN.[1]

By PHILIP ZENNER, M.D.,

CLINICAL LECTURER ON DISEASES OF THE NERVOUS SYSTEM, MEDICAL COLLEGE OF OHIO, CINCINNATI, O.

THE patient, a man forty-two years of age, had always enjoyed good health previous to the time of injury. On July 11th, nearly eleven weeks ago, while leaning forward in the show-case of a millinery establishment, a transverse bar, upon which he was supporting himself, gave way, and precipitated him upon a sharp-pointed iron rod used for holding hats. This rod is about one-quarter inch in diameter, smooth and round, and within about an inch of the end begins to taper to a point. It penetrated the skin in the right submaxillary region, about one and one-third inch to the right of the median line, the point passing four inches beyond the surface. Its direction, according to the statement of lookers-on, was upward, and somewhat inward and backward. The rod was held very firmly in a fixed position, as if between unyielding tissues, and was only removed after a very forcible effort made by a powerful man.

Patient's wife states that he rose immediately after the fall, and continued on his feet until after the rod was removed, some minutes later. Shortly afterward, while removing him to his room, they observed that he did not move his right arm and leg. He did not speak from the moment of the fall.

The speaker saw the patient perhaps one-half hour after the accident occurred. There was still slight oozing of blood from the wound, from which perhaps an ounce of blood had escaped. Patient was lying in bed, breathing regular, but somewhat stertorous; pulse regular, about eighty beats to the minute. There was complete paralysis of the right upper and lower extremities, of the tongue, of the muscles supplied by the lower branches of the facial nerve in both sides, and the patient could not swallow or give utterance to any sound, either articulate or non-articulate. But he was conscious, and, to some extent, could answer questions by the movements of the left hand or the eyeballs. There was no paralysis of the muscles supplied by the third, fourth, sixth, and upper branches of the seventh nerves. The pupils were normal, the eyes could be equally moved in every direction, and could be readily opened and closed. There appeared also to be no impairment of hearing or vision.

The patient was exceedingly restless and seemed to suffer much with pain in the left side of the face. A few days later, anæsthesia in the area supplied by the upper two branches of the left trifacial nerve was observed, which was probably present in the beginning, but not detected, although an unsatisfactory examination of the cutaneous sensibility was made at that time.

In addition, it was observed that the lower jaw was turned to the left side, so that when the jaws were approximated the right central incisor of the lower jaw corresponded to the left central incisor of the upper jaw. This condition still remains. At first I thought it was due to paralysis of the right pterygoid muscle, but now believe it to be a surgical trouble.

[1] Read before the Cincinnati Academy of Medicine, September 21, 1885.

The condition of the patient improved very rapidly. The external wound healed in a few days. At no time was there any evidence that the rod entered the buccal or pharyngeal cavity. There was slight fever, temperature never rising above 101.5° F., on the second and third day; none subsequently.

On the second day patient succeeded in swallowing a few drops of water and moved the right leg a little. On the fourth day he was able to make a slight vocal, and even articulate, sound. On the sixth day he moved the right arm a very little. On the eighth day he swallowed so well that rectal injections of food, which had previously been given, were discontinued. At the end of two weeks he could speak single words with some distinctness, though continuous speech was impossible on account of difficulty of articulation; he could walk with the assistance of a cane; the muscles of the left side of the face seemed to act quite normally, while there was still paresis of the right side; the tongue was easily protruded, but was deflected slightly to the right. There had been almost a constant dribbling of saliva from the mouth, but this became much less.

He continued to improve for about six weeks, when his condition was at its best. Since then there has been some change for the worse. His speech is less distinct, and the power of the right extremities less than a few weeks ago. The anæsthesia on the left side of the face is greater. It appeared at first to be only in the area supplied by the upper branches of the fifth, and even in that area sensations of pain were still felt. Now it seems to cover almost the whole area covered by the fifth nerve, extending from the middle of the vertex to below the lower margin of the inferior maxillary bone, and from the median line to the left ear, the latter retaining its sensibility. In this area tactile sensibility, as well as that to temperature, is lost, and the prick of a pin is only felt in a few isolated spots. The left nares, and left side of the mouth and tongue are anæsthetic, and the sense of taste is lost in the left side of the tongue. In addition to this, the subjective symptoms seem to be much worse than they were. He complains constantly of pain or uncomfortable sensations of some kind in the left side of the face.

Another symptom has appeared recently—polyuria. For three or four weeks he has been passing an excessive quantity of urine. Eight days ago he passed two hundred and eight ounces, and its specific gravity was 1.001. The quantity has been gradually diminishing since. At present it is eighty ounces, specific gravity 1.010. It does not contain sugar or albumen. Several times I examined the electrical reactions of the paralyzed muscles, which were always found to be normal.

There is now considerable dragging of the right foot in walking. Grasp of right hand is feeble, the extensors of fingers almost completely paralyzed. The tongue, when protruded, deflects slightly to right. There is slight paresis of the face on the right side. The articulation is much more indistinct than in ordinary cases of hemiplegia, at least at so late a date. There is no aphasia. Patient can name any object accurately. There is complete anæsthesia in area of the left fifth nerve, left corner is anæsthetic, etc. There is also some injection of the left conjunctiva, more or less bleeding from the left nostril, and an abraded surface in its exterior part, and a slight abrasion on left side of tongue.

The early symptoms of paralysis of the vocal cords, in-

ability to swallow, etc., are bulbar symptoms and point to a lesion in the neighborhood of the medulla. They were mostly indirect symptoms, and therefore disappeared. Of the remaining symptoms the paralysis of the left fifth nerve is of decided local significance, and points to a lesion in the nerve-roots or its nuclei. It is possible that there are several lesions present; but one on the left side of the medulla or pons, involving either the ascending root of the fifth nerve, or the nerve-trunk itself, might account for the symptoms. In that case the pyramidal tracts and the right hypoglossal and facial nerves must have been affected on the left side, the former before it crosses over to the right side of the cord, and the latter in their central prolongations before they have crossed over to their respective nuclei. The lesion must then reach above the level of the seventh nerve, and, in that case, it is difficult to understand how the third, fourth, and sixth nerves should have been altogether spared, even in the beginning, when so many indirect symptoms were present. Perhaps only a small part of the lesion reaches to this high level, and thus the absence of symptoms are to be accounted for. The lesion must have also avoided the sensory track for the opposite side of the body, and perhaps encroached upon the particular lesions which are followed by diabetes, that is, the floor of the fourth ventricle above the nuclei of the pneumogastrics. Just how this lesion was produced is very problematical. There are good reasons for believing that the rod penetrated the cranial cavity between the atlas and occipital bone. This is the only place through which it could reach that cavity without fracturing bone, and the symptoms did not indicate any fracture. The rod entered four inches beyond the surface, and various calculations made by the speaker lead him to believe that the anterior margin of the foramen magnum is not more than three and a half or four inches from the external wound. Nevertheless all these symptoms could not have been caused by the penetration of the rod into the nervous tissue. In the cadaver the anterior margin of the foramen magnum corresponds with the lower portion of the olivary body, and a single lesion at this point would not account for all of the symptoms, while an extensive injury here would have led to an immediately fatal termination. Perhaps in some way a blood-vessel may have been occluded, and thus an area of softening in the above-mentioned part was produced.

The prognosis is not altogether favorable. The increase in the anæsthesia, the recent development of diabetes, and the increased feebleness in the paralyzed side seem to indicate a progressive process, and but slight extension of the lesion in a part of such vital importance might speedily produce a fatal issue.'

ACCOUCHEMENT BY FIREARMS.—Dr. Granier, surgeon in the French army, writes from Algeria: "A few days after the occupation of Brizerte, when the military authorities had forbidden, under the severest penalties, the discharge of firearms within the town, the whole garrison was awakened at three o'clock one morning by the tremendous explosion of a heavily loaded gun in the neighborhood of the ramparts; a guard of soldiers rushed into the house from whence the sound had come, and found a woman lying on the floor, with a newly born babe between her thighs. The father of the child stood over his wife with the smoking musket still in his hand, but his intentions in firing the gun had been wholly medical, and not hostile to the French troops. The husband discovered that his wife had been in labor for thirty-six hours. Labor was slow and the contractions weak and far apart. He had thought it advisable to provoke speedy contraction, and, following the Algerian custom to *scare the baby* out, he had fired the musket near his wife's ear; instantaneously the accouchement was terminated. After being imprisoned twenty-four hours the Arab was released."—*Cincinnati Lancet*, August 1, 1885.

SUCCESSFUL CASES OF PULMONARY PHTHISIS.

BY W. H. GEDDINGS, M.D.,

AIKEN, S. C.

(Continued from page 374.)

CASE XIX. *Infiltration of right lung; recovery.*—A young married lady; my own case; family consumptive. Four weeks she has had cough, with severe pleuritic pain on the right side. Has had more or less fever, with perspirations at night.

January 11, 1880.—Pulse, 104; temperature, 99°. Pale and quite delicate in appearance. Diminished resonance over the upper portion of the right lung in front, with dulness over scapular and interscapular spaces. Respiration bronchial, with prolonged experium.

April 6th.—Is greatly improved, and has been able to resume her rather arduous duties of housekeeper of a large boarding-house. Still coughs a little. Can detect no dulness in front, but it is still apparent over the suprascapular and corresponding interscapular regions. At the time of writing (1885) this patient remains in perfect health and has no cough.

CASE XX. *Infiltration of upper portion of right lung, hemorrhages; recovery.*—Male, thirty-four years of age. (Dr. Riggin Buckler, of Baltimore, Md.) No hereditary predisposition to consumption. Disease began with a slight hemorrhage in February, 1880. Has had several since then, and has lost four pounds. Came to Aiken in November, grew better, and went to Gainesville, Fla., where he improved at first, but subsequently lost ground.

March 3, 1881.—Pulse, 68; temperature, 97.5°; pale, with slender figure; weight, 147½ pounds; appetite poor, but with good digestion. Has cough, and expectorates one half ounce of muco-purulent matter. Can walk two miles without feeling fatigued. On the right side, dulness from the clavicle to the third rib and over the suprascapular region; also over the axillary region. Auscultation affords no evidence of disease other than occasional rhonchi, except over the interscapular space, where it is distinctly bronchial.

April 5th.—With the exception of slight hæmoptysis, a few days after his arrival, he has steadily improved. Pulse, 72; temperature, 98.5°; weight, 155½ pounds—a gain of eight pounds. Appetite has improved and the digestion is good. Can now walk six miles without being tired. No change in the condition of the diseased lung in front, but behind and in the axilla the dulness is less marked. He remained a couple of weeks longer in Aiken, suffered with the heat, and lost one and three-fourths pound of what he had gained. Dr. Buckler wrote me a year later (February 18, 1882) that his patient had grown so stout that his friends could scarcely recognize him, and that, with the exception of being a little short-winded he was apparently quite well.

CASE XXI. *Infiltration of right apex, hemorrhages, night-sweats; recovery.*—A young man, twenty-one years of age, from Pittsburg, Pa., a patient of Dr. Fundenburg, of the same place Was also examined by Dr. Da Costa, of Philadelphia. Family record good. Cough began in July, 1881; had night-sweats, and lost twenty pounds.

November 1, 1881.—Patient is slender, complexion sallow, finger nails clawed. Cannot walk a quarter of a mile without being fatigued. Pulse, 92: temperature, 98.2°. Cough moderate, with one-half ounce of muco-purulent expectoration. On the right side there is dulness, extending in front from the clavicle to third rib, and posteriorly to one inch below the spine of the scapula, with diminished resonance in the axillary region. The respiration on the same side is bronchial, with prolonged experium.

During the first month of his stay in Aiken he grew steadily worse, his temperature rising at times to 102°, but about the middle of December he began to improve,

and, with the exception of a slight hemorrhage in January, did well until April 10th. His cough and expectoration ceased, and he gained six pounds. He passed the summer at Bethlehem, N. H., and in the fall made a voyage to England, doing well all the while. Returning to Aiken in November, 1882, he again improved. In the summer of that year he went to Bismarck, Dak., and held his own until December 30th, when he again returned to Aiken for the third time. When last seen (1885) there had been no return of cough, and the only evidence of disease was slight dulness at the apex of the right lung. He has since written to me that he has remained quite well.

CASE XXII. *Extensive disease of right lung, hemorrhage, profuse expectoration; arrest.*—A young machinist of Boston, twenty-four years of age, a patient of Dr. McDonald, of that place. Had acute pneumonia in 1875, followed by cough, which, after ceasing for a time, returned in the fall of 1880, and has persisted ever since. One sister died of phthisis. Has had only one hemorrhage, but the sputa have been tinged with blood. Has lost ten pounds.

November 14, 1881.—Pulse, 100; temperature, 99.5°; weighs 143½ pounds. Cough troublesome, with about eight ounces of muco-purulent expectoration in twenty-four hours. On the right side there is dulness in front, from the clavicle to the fourth rib; behind diminished resonance over the upper third of the shoulder-blade. The respiratory murmur on that side is feeble, with prolonged experium.

January 17, 1882.—Much improved in appearance. Pulse, 80; temperature, 99.2°; weight, 148¾ pounds, a gain of five and one-half pounds. Coughs but little; expectoration is reduced from eight ounces to one ounce a day. The area of dulness has receded to the second rib. This patient did so well that he did not deem it necessary to consult me again. He continued to improve and is now (1885) settled on a farm in Florida, where he is reported to be in the best of health.

CASE XXIII. *Infiltration of right lung; recovery.*—A clergyman, thirty years of age, of Concord, Mass.; patient of Dr. Emerson of the same place. Hereditary tendency to phthisis, great-grandfather, grandfather, and one brother have died of phthisis; also several cousins. Resembles father. Has had tinged sputa, but no hemorrhages. Has lost eight pounds. Has occasional chills, followed by fever. Disease began with bronchial catarrh in January, 1881.

August 18th.—Pulse, 88; temperature, 98.7°. Has slight cough, with two and one-half drachms of muco-purulent expectoration. On the right side there is diminished resonance in front over supraclavicular space, with dulness from thence downward to third rib. Posteriorly dulness from apex to within two inches of the angle of the scapula. Respiratory murmur, both front and back, is feeble, with prolonged experium. Patient improved during his stay at Bethlehem, passed the winter on Moosehead Lake, Me., where he gained rapidly. He afterward removed to Cordova, in the Argentine Republic, where he completed his cure. In a letter from him in 1884, he represented himself as quite well, and was anxious to return to the United States.

CASE XXIV. *Extensive disease of right lung, hemorrhage, emaciation, etc.; complete arrest.*—Male, thirty years of age, Cincinnati; patient of Dr. Hunt, of Covington, O. Disease began in the spring of 1881 with fever and cough, followed by hæmoptysis in October of the same year. Has lost thirty-one pounds.

December 17, 1881.—Pale and slender, nails clawed; pulse, 96; temperature, 99.6°; weight, 114 pounds. Is so weak that a walk of half a mile causes great fatigue. Has cough, with about one drachm's expectoration. Right front dull from clavicle to fourth rib, and behind from the spine of the shoulder-blade to its angle. Respiration feeble and indistinct.

May 9, 1882.—Patient has steadily improved. Pulse and temperature are normal; weight, 133½ pounds—a gain of nineteen pounds. Walks five miles without the slightest fatigue. Has neither cough nor expectoration. All physical signs of disease have disappeared. Has not been heard from since his return home.

CASE XXV. *Infiltration of upper portion of right lung, night-sweats, etc.; arrest.*—December 9, 1881.—A young lady from Quebec, a patient of Dr. C. Sewell, of the same place. Strong hereditary predisposition to phthisis—one uncle, two brothers, and a sister having died of that disease. Has had persistent cough, with occasional night-sweats, since June, 1881. Pulse, 76; temperature, 99.5°; appetite poor, with more or less dyspepsia. Cough troublesome, with one drachm of expectoration. Weight, 136½ pounds. On the right side, dulness from clavicle to second rib in front, and over supraspinous fossa behind. Respiratory murmur feeble, with warm, moist râles.

January 10, 1882.—Pulse, 86; temperature, 99.8°; weight, 140 pounds—a gain of three and a half pounds. Appetite and digestion quite good. Cough much improved. The dulness has disappeared from the back, but is still quite perceptible in front. When last heard from this patient was quite well, but deemed it prudent to pass her winters at Bournemouth, England.

CASE XXVI. *Infiltration of right apex, profuse hemorrhages, arrest for two years, relapse, and subsequent recovery.*—January 2, 1882.—A lawyer from Wellesly, Mass., thirty-four years of age; patient of Dr. A. Hosmer, of Watertown, Mass. Hereditary predisposition to phthisis. This patient came to Aiken several years ago with marked disease of the right apex; had several hemorrhages, but made a good recovery and remained well for two years. In 1876 he had a return of the hemorrhages, but again improved. The same thing occurred in August, 1881. Complexion fair, nails clawed; pulse, 80; temperature, 99.5°; cough, moderate. Right side dull in front from clavicle to second rib, and behind over the scapula, extending one inch below the spine of that bone. Bronchial respiration, with prolonged expiratory murmur.

March 27th.—Has improved steadily. Pulse and temperature normal; has but little cough. Dulness persists in front, but posteriorly there is only slightly diminished resonance over the supraspinous fossa. He presents the appearance of a person in robust health. Subsequently he removed to Florida, where, at last accounts, he was still living in the enjoyment of almost perfect health.

CASE XXVII. *Infiltration of right apex, hemorrhages, night-sweats, etc.; recovery.*—A gentleman, forty-eight years of age; patient of Dr. J. M. Da Costa, of Philadelphia. One brother died of chronic pneumonia. Disease commenced with an attack of hæmoptysis in July, 1881, followed by cough and night-sweats.

January 21, 1882.—Tall and slender, complexion sallow. Pulse, 72; temperature, 98°; weight, 154 pounds. Has slight cough without expectoration, good appetite, and fair digestion. On the right side there is an area of dulness extending in front from the clavicle to fourth rib, and to one inch below the spine of the scapula; behind, marked prolongation of expiratory murmur.

March 23d.—Greatly improved, having gained five pounds in two months. Pulse, 57; temperature, 97.8°. Has scarcely any cough, and is apparently quite well. The area of dulness in front has receded to second rib, posteriorly it remains unchanged. Patient has continued to improve, and at last accounts was doing well.

CASE XXVIII. *Infiltration of left apex, night-sweats, with emaciation; recovery.*—A little girl, ten years of age; patient of Dr. Minot, of Boston, had capillary bronchitis in January, 1882 and has coughed ever since; has had night-sweats and has lost from five to ten pounds.

March 4th.—Pulse, 100; temperature, 99.4°; has a good appetite, and can walk a mile without being fatigued. Has a little dry cough. There is a small area of dulness

under the third rib, near its junction with the sternum. Posteriorly there is dulness from the angles of the scapula to the base of the lung. Respiration rough, with prolonged experium.

May 6th.—Much improved. Pulse, 84; temperature, 99°. Has still slight cough, but in other respects appears to be in perfect health. The dulness is still perceptible in front, but over the back it is confined to a narrow strip at the base of lung. During the summer she was examined by a leading specialist in Boston, who declared that he could detect no dulness. She has remained quite well ever since.

CASE XXIX. *Infiltration of the upper portion of the right lung, profuse hemorrhages, night-sweats; recovery, with a gain of forty pounds.*—A young Charlestonian, twenty-one years of age; patient of Dr. J. F. M. Geddings, of Charleston, S. C. Both paternal grandparents died of phthisis, and his father had hemorrhages when a young man, but is now quite robust and in perfect health. In 1880 he had hemorrhages, followed by fever, cough, and emaciation, but recovered, and remained quite well until April 29, 1882, when he had another attack of bleeding.

May 16th.—He has lost twenty-five pounds, is pale, has moderate cough with a small amount of expectoration. Pulse, 100; temperature, 99.5°; weight, 153¾ pounds. Over the right lung there is dulness in front from clavicle to third rib, and posteriorly a more extensive area of dulness extending from the apex to within an inch and a half of the angle of the scapula. Respiratory murmur feeble, with prolongation of the experium. He improved rapidly, lost his cough, and was so well that he indulged in dancing and rowing with impunity. He remained in good condition until the end of July, when he brought on a severe attack of hæmoptysis by climbing Lannon Mountain from the Profile House, from which the ascent is very precipitous. He rallied from this attack, but had a recurrence of the hemorrhage in the fall, this time bleeding at times quite profusely—as much as three pints in as many days and necessitating the constant application of ice. Since then he has steadily improved, and at the present date (January, 1885) is perfectly well and is pursuing his studies as a medical student. His pulse and temperature are normal; he has had no cough for over a year, and has gained forty pounds in weight. The only evidence of disease is a limited area of dulness at the apex and over a small portion of the interscapular space.

CASE XXX. *Disease of right apex, hemorrhages, and emaciation; arrest.*—A Wall-street broker, thirty years of age, a patient of Dr. A. L. Loomis, of New York. Disease commenced with bronchial catarrh in October, 1882. During that month he had five profuse hemorrhages, bleeding at one time as much as twelve ounces. Has lost nineteen pounds.

December 13th.—Pale and slender, nails clawed. Pulse, 100; temperature, 99.3°; weight, 142¼ pounds. Cough troublesome, with about two and a half ounces of expectoration. In front there is dulness on the right side, extending from the clavicle to the third rib, and behind from the apex two inches below the spine of the scapula. Expiratory murmur is prolonged; other respiratory symptoms not noted. He improved rapidly, and by the 7th of March, 1883, had gained fourteen pounds, and for two and a half months has been entirely free from cough.

April 3d.—Looks quite robust. Pulse, 80; temperature, 98.3°. The warm weather of spring has brought on a slight attack of gastric catarrh, causing him to lose one and a half pound of the fourteen gained during the winter. There is no dulness in front, and only a small patch of diminished resonance behind. This patient has not been heard from.

CASE XXXI. *Infiltration of right apex; recovery.*—A lady from Albany, N. Y., thirty-eight years of age; patient of Dr. W. H. Draper, of New York. Comes of a phthisical family; maternal grandmother, a brother, and a sister having all died of consumption. The father had "weak lungs" when young, but recovered, and is now quite well. She had persistent cough in 1878, but recovered and remained well until April, 1882, at which time the cough returned and has been present ever since.

December 19, 1882.—The patient is a frail-looking woman, with pale complexion. Has a fair appetite, but her digestion is much impaired. Weight, 103½ pounds. Has cough, with a moderate amount of expectoration, all of which floats. There are evidences of dulness over the upper portion of the right lung extending in front to the fourth rib, and posteriorly half-way down the scapula, the expiratory murmur being feeble and jerking.

April 21st.—Notwithstanding repeated attacks of dyspepsia patient has improved, and has gained six and a half pounds in weight. Has only slight cough. The front is resonant, and the only evidence of disease is a small area of dulness over the middle of the interscapular space. She has been under my observation ever since, and is now quite recovered, having had no cough, except from an occasional cold, for over a year.

CASE XXXII. *Infiltration of left apex, night-sweats, emaciation, etc.; recovery.*—Male, aged twenty-seven; patient of Dr. Fassett, of St. Alban's, Vt. Has had occasional cough since 1875; persistent since August, 1882. Has lost twenty-eight pounds.

January 18, 1883.—Complexion clear; figure slender; rather frail looking, with flabby muscles. Pulse, 100; temperature, 99.5°; weight, 140 pounds. Suffers with night-sweats. Has moderate cough, and expectorates about six ounces of muco-purulent matter, all of which floats. On the left side there is marked dulness from clavicle to second rib and over the supraspinous fossa, with feeble respiratory murmur.

April 9th.—Pulse, 84; temperature, 99.7°; weight, 150 pounds—a gain of ten pounds. Is much improved in strength, has but little cough, and only one and one-half ounce expectoration. The only physical signs of disease are, an area of diminished resonance over the supraspinous fossa, and feebleness of the respiratory murmur. A report received from Dr. Fassett, a year later, represented the patient as quite well, and stated that he had resumed his business.

CASE XXXIII. *Infiltration of upper third of right lung, resulting from acute pneumonia, night-sweats and emaciation; complete recovery.*—An Englishman, aged thirty-two, from Perthshire, a patient of Dr. Sloman, Surrey, England.

On December 14, 1882, he was seized with a severe chill, followed by fever, cough, and rusty expectoration.

February 3, 1883.—A blond, slender figure, and well built, with firm flesh. Pulse, 72; temperature, 98.5°; weight, 137¾ pounds. On the right side there is dulness extending in front from the clavicle to fourth rib, and posteriorly to the middle third of the scapula, with feeble respiratory murmur. Appetite not very good; digestion fair. Has night-sweats.

April 3d.—Has improved steadily. Pulse and temperature have remained normal; has gained seven and three-quarter pounds. There is no trace of dulness, and the respiratory murmur is vesicular on both sides.

CASE XXXIV. *Infiltration of right apex, with fever, night-sweats, and emaciation; recovery.*—A medical student, aged twenty-three, from Whitestown, Oneida County; a patient of Dr. Janeway, of New York. Disease began with bronchial catarrh in the autumn of 1881. Had cough and night-sweats, with emaciation to the extent of ten pounds. Expectoration has been at times tinged with blood.

February 12, 1883.—Slender figure, with sallow complexion. Pulse, 100; temperature, 101.5°; weight, 114 pounds. Appetite poor, but with fair digestion. Cough troublesome, with one-half ounce of expectoration. Over the right front dull from clavicle to fourth rib, posteriorly from the apex to one inch below the scapula. Respiratory murmur feeble.

May 10th.—Much improved. Has gained seven and one-quarter pounds. Coughs but little, and does not expectorate more than two teaspoonfuls in twenty-four hours.

He continued to improve during the summer, and also during the following winter. When last examined the dulness had disappeared from the front, except over a limited area beneath the clavicle and over the interscapular space.

Reports received this winter (1885) inform me that he is quite well, and that he is engaged in business in Syracuse as a drug clerk.

CASE XXXV. *Disease of the apex of the right lung; recovery.*—A young German, from New York, twenty-five years of age. The disease began with bronchial catarrh in 1875, followed by several slight hemorrhages. Spent the summer on Schooley's Mountain, N. J., where he lost his cough, and returned to New York, to all appearances quite well. There, by the advice of his physician—an eminent specialist in pulmonary affections—he resumed his business, but was soon again compelled to relinquish it on account of a return of the old symptoms. He was then sent to the Adirondacks, where he again improved, but finding himself ill on his return to New York, he started for Europe, where he was treated successively at Falkenstein (Dr. Detweiler), at Davos, and at Mesan (Dr. Pircher). The patient has passed the whole winter at Aiken, but has done so well that he has not required medical advice.

May 13th.—Pulse, 88; temperature, 99¾°; looks well, and has a good, healthy color. Has increased in weight. At all the other resorts he has frequented the sputa have been more or less tinged with blood; but since his arrival in Aiken there has been no trace of bleeding. He expands the chest to the extent of three inches without any great effort. Dulness quite pronounced under and below the right clavicle; in the axillary line the percussion sound is short. On the back of the same side there is also dulness under the superspinous fossa. Auscultation reveals bronchial respiration over the left apex, with prolonged expiration in the axillary region. Mucous râles, formerly observed by Dr. Pircher, under the upper portion of the scapula, have all disappeared. This patient is now (1885) established in Switzerland, and is in perfect health.

CASE XXXVI. *Extensive infiltration of the upper third of left lung, large cavity, repeated hemorrhages, emaciation; recovery.*—A Spanish merchant, native of Barcelona, but for several years a resident of Charleston, S. C., and a patient of Dr. Bellinger, of that city. He is thirty years of age, and has no hereditary predisposition to phthisis. Disease began with bronchial catarrh in May, 1881. Has had several moderate hemorrhages, during one of which coughed up a well-defined cast of a portion of the bronchial tubes. Has lost eleven pounds.

November 3, 1882.—Patient is tall and slender, with dark, sallow complexion. Nails characteristically clawed. Pulse, 112; temperature, 99.8°; weight, 138¾ pounds. Patient has a very poor appetite, and suffers with indigestion. Cough is very troublesome, with muco-purulent expectoration, a portion of which sinks if expectorated into water.

Over the left front there is distinct dulness from the clavicle to the fourth rib, with an area of tympanitic resonance over the third rib. Over the back there is also dulness extending from the apex to two inches below the spine of the scapula. Over this space there is cavernous respiration, with pectoriloquy in front and moist râles posteriorly.

April 13th.—Patient rapidly regained his appetite and strength, and notwithstanding his having had a severe diarrhœa and several attacks of rheumatism, is much improved. He is much stronger, and sometimes walks six miles without experiencing any fatigue. Pulse, 92; temperature, 98.8°. The extent of the infiltration remains unchanged, and the evidences of cavity are still present. On leaving Aiken, he returned to his home in Barcelona, where he continued to improve, and at last accounts (1884) was quite well.

CASE XXXVII. *Infiltration of the upper portion of left lung.*—A young man from Burlington, Vt., the name of whose physician I failed to note, presented himself at my office, 1877, with history of cough, emaciation, etc., extending over several months. Temperature, 100.6°; cough troublesome. Physical examination revealed a slight area of dulness over the left subclavicular region and under the scapula.

April 22d.—During the winter he had a slight hemorrhage, but is now much improved in general appearance and coughs less. Temperature, 99.2°. Has increased five pounds in weight. Dulness in front unchanged, but behind it does not extend more than one inch below the spine of the scapula.

He returned to Aiken the following winter, but was so well that he did not present himself for examination. In the summer of 1884 he called on me in Bethlehem, N. H., and reported that he had had no further trouble since his departure from Aiken in 1878. He was then (1884) in robust health.

CASE XXXVIII. *Repeated hemorrhages, night-sweats, emaciation, infiltration of right lung with cavity.*—Male, thirty-three years of age; patient of Dr. James W. White, of Philadelphia. Maternal grandmother, mother, and maternal uncle died of phthisis. No marked resemblance to either parent. Disease began with an attack of hæmoptysis on October 5, 1882. Visited the Bermudas, but grew worse while there. Has lost twenty pounds.

December 24, 1883.—The patient, who is of medium size and well built, is rather pale, with clawed fingernails. Pulse, 88; temperature, 100.5°; weight, 138½ pounds. Appetite and digestion good. Cough moderate, with two ounces of muco-purulent expectoration. Suffers with night-sweats. Over the right front there is marked dulness from the clavicle to the fifth rib, with diminished resonance from that point to the base. Below the clavicle there is pectoriloquy and cavernous respiration. Posteriorly there is a corresponding area of dulness extending to the angle of the scapula, with slight dampening of the percussion sound over the lower half of the lung. Respiratory murmur feeble, with increased vocal resonance. There is, also, dulness over the axillary region.

April 8, 1884.—With the exception of a slight hemorrhage, the patient has steadily improved. Pulse, 80; temperature, 99°; weight, 144½ pounds. Sweats have ceased. Cough persists, but the expectoration is reduced to one ounce. The lower border of the dulness anteriorly has receded to the third rib, the lower portion of the lung having recovered its normal resonance. Posteriorly there has been no change in the physical symptoms.

April 28, 1885.—Patient remained quite well during the summer, returned to Aiken in the fall, and has continued to improve throughout the winter. His face is full and ruddy, his limbs well rounded; his general appearance being that of a person in the most robust health. He walks nine miles without experiencing the slightest fatigue; going out day and night in the worst weather with perfect impunity. During the past year he has not had a single day's illness. He still coughs a little, but there has been a steady diminution in the extent of the infiltration. In front the dulness remains unchanged, but behind the only evidence of disease is slightly diminished resonance over the upper half of the scapula.

CONCLUSIONS.—In summing up the above the reader will be struck with the great preponderance of cases in which the disease was located in the right lung. Including the three cases in which both lungs were implicated the right lung was affected in thirty, and the left in only

eleven instances. I have not had time to ascertain whether this accords with the experience of other observers, but even without this confirmation the large number of cases extending over five or six years would appear to establish the fact that the disease, when located in the right lung, affords a much more favorable prognosis than when the left is the seat of the disease. The question of heredity was lost sight of in many of these cases, but in those in which it was noted there was evidence of hereditary transmission in thirteen out of seventeen.

The average age of the above cases when they came under treatment was twenty-nine years. Three were children under ten, two of whom made perfect recoveries, while one relapsed, after having enjoyed good health for over a year, and is still under observation, but is doing well. It is worthy of remark that these were the only children among several hundred phthisical patients treated, and the fact that recovery took place in every case is a striking confirmation of the now generally received opinion that the prognosis of phthisis in children under ten years of age is much more favorable than at any other period of life.

Hemorrhages occurred in twenty-two cases, *i.e.*, in two-thirds of the whole number.

Cavities were observed in only three cases, proving conclusively that recovery is rare after softening has begun.

The fact that twenty-nine males recovered, and only nine females, is somewhat remarkable. It is true that more males than females visit health resorts, but this fails to account for the great disparity in the general result, and forces upon us the conclusion that the disease is much more fatal among women than among men.

It is but fair to state that the above cases include only a small proportion of those who have recovered at Aiken. Many were treated by my colleagues, who doubtless obtained equally good results, but a still larger proportion, I am convinced, recovered without medical aid. These comprise cases of incipient phthisis, in which change of climate alone effects such marked improvement that they deem it unnecessary to invoke medical aid. Although successful in many cases this is a course which no physician of experience would advise an invalid to adopt. In a chronic disease, especially in consumption, the patient is over-sanguine, and is only too ready to emancipate himself from medical control, and, if left to his own guidance, will often by imprudence and neglect undo the work of years. The consumptive may at times need no drug treatment, but he is always the better for judicious medical supervision. He should always be made to realize that arrest does not necessarily imply a cure, and where it is possible I always insist upon the patient's remaining under supervision for at least two years after all signs of active disease have disappeared.

Rearing Premature Infants.—Professor Tarnier presented at the Académie de Médecine two children, born at the sixth month, whom he had succeeded in rearing by the aid of the couveuse, and forcible feeding with woman's milk. Two drachms of milk were injected through a caoutchouc tube into the stomach every hour for the first three days, and then four drachms were injected every three hours. It is necessary to begin with small quantities, or the child becomes swollen by an acute œdema through hypernutrition. The couveuse is used at a temperature of 86° to 98° F. The younger the infant the higher the temperature employed. Dr. Blot observed that he regarded the couveuse as a useless procedure, as the same results are attainable by the employment of cotton and bottles of hot water. M. Tarnier said that during the employment of the couveuse he had on several occasions been astonished at the rapid disappearance of the sclerema of infants.—*Medical Times and Gazette.*

THE ACTION OF HYDROBROMATE OF HYOSCIN.

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From some little experience with hydrobromate of hyoscin upon the insane, I would like to offer a few words in regard to it, as it has been brought prominently forward by the valuable article of Drs. Peterson and Langdon, in The Record of September 19th.

To the conclusions arrived at by them agreement in a general manner must be accorded, but it seems that the drug has more usefulness than they would indicate. In sthenic acute conditions, or violent manifestations arising in the course of chronic insanity, it has notably and promptly lessened the excitement, and in the frenzy of melancholia has mitigated the outbreak in cases where it has been tried in this hospital. While not doubting that its continued administration in small and often repeated doses will disarrange alimentation—and what powerful drug does not?—it has yet rendered signal service in tolerably full doses, $\frac{1}{40}$ grain, given when specially indicated, without producing any untoward symptoms whatever. By watching its action upon others, and upon myself, in varying doses, it did not seem advisable to give it in a more routine manner than one does morphia or atropia in parallel cases, and, so far, more than two doses of $\frac{1}{40}$ grain have not been used in twenty-four hours.

By careful sphygmographic observations it is clearly shown that minute doses—$\frac{1}{100}$ to $\frac{1}{100}$ grain—of the hydrobromate are stimulant of cardiac action, and thereby of the mental processes and attendant manifestations, not only among the insane, but in a condition of health. With a larger dose—$\frac{1}{40}$ to $\frac{1}{30}$ grain—this also is the primary result, but as more of the medicament comes into operation it is followed by a slowing of the pulse-rate and by a diminution of the cardiac curve of the tracing, sometimes to such an extent that a bruit of dicrotism appears. A feeling of fatigue, or rather of comfortable weariness, if you will permit such a term, is now associated, and one gives up readily to feelings of drowsiness, sleep following naturally. After using the drug in $\frac{1}{40}$ grain doses for from six to ten consecutive nights, with an average of six hours' sleep, for instance, its discontinuance has been followed, but only after several nights, by wakefulness, which again gave way to the remedy. In some instances of confirmed insomnia, or rather of often-disturbed sleep, after securing a few nights' good rest the patient has rested fairly well, the habit of waking at certain times being broken, and in general the effect of the drug is lasting. When given by the mouth, as was pointed out in the article above referred to, its action is slow and there is considerable variability as to the amount required by different patients. Although no notable depression has come under observation from the use of the drug in such doses as are indicated above, it no doubt is capable of producing stupor just as does hyoscyamia, which doubtless in the amorphous form contains it largely, but which is associated with little danger, according to a recent writer in the London *Lancet*, who gave unhesitatingly $\frac{1}{3}$ grain, and even $\frac{2}{3}$ grain of Merck's preparation, producing coma, etc.

It may be not uninteresting to note that hyoscin is a very active mydriatic. It was found that two drops of a solution one-tenth grain to the ounce of distilled water produced complete dilatation of the pupil and paralysis of the accommodatory muscles in about five minutes, and that it was more active to stretch the adhesions in a case of posterior synechia than the repeated instillation of a solution of atropia sulphatis three grains to the ounce. The mydriasis so produced is very persistent, lasting from five to ten days, and the use of the solution is not attended, as far as observed, with any conjunctival irritation, which will suggest its value to oculists where the long-continued action of a mydriatic is required.

From the little learned concerning the drug it would seem to be of use in conditions of intensified nerve action, especially of cerebral origin, to meet acute manifestations.

A SCHEMATIC EYE FOR STUDENTS OF OPHTHALMOSCOPY.

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THE most difficult part of ophthalmoscopy for the student to master is refraction, and as a good knowledge of this can only be attained by long-continued and careful practice, many students are deficient in it through lack of time and suitable subjects for examination. Again, in examining the fundus of an eye, from not having an object of known size for comparison, they often think that they see objects *distinctly* which should not be distinctly seen under the conditions. The reason of this is, that beginners in ophthalmoscopy are apt to focus on large objects, such as the optic nerve or the large blood-vessels, instead of the smaller branches of the vessels. In order to assist those who desire to perfect themselves in this branch of ophthalmology, I have arranged an instrument which may be called the student's schematic eye, and which differs in some respects from those now in use.

It consists of a tube 2½ inches in length and 1⅛ inch in diameter, attached by a hinge to a vertical rod, which rests on a stand and can be raised or lowered at will. In one end of this tube is a convex lens of 3 inches (13 D.) focal distance, which represents the refractive media of the eye. Just behind this is a perforated diaphragm of leather, which represents the iris and pupil. Telescoped in the other end of the tube is a second tube, 2¼ inches in length, which is moved in or out by means of a pin and ratchet. At the remote end of the second tube is a disk of metal which represents the retina, and on it is placed a card, in the centre of which is a circle of $\frac{1}{10}$ inch diameter, with two lines crossing the centre at right angles to each other. In the space about the lines are photographed sentences, the letters of which are too small to be distinguished without a magnifying-glass (about one-half size of No. 1 Jaeger). If we place this disk at 3 inches from the lens, we have the condition of an emmetropic eye: if it is moved nearer we have hypermetropia; if further, myopia. The inner tube is graduated to show the degree of each.

In order to produce the condition of astigmatism a convex lens of 3 inches focal distance, on which has been ground a cylindric lens of 30 inches focal distance, is substituted for the original lens; and by adjusting the inner tube nearer them, or beyond the focal distance, the various forms of astigmatism are produced.

This instrument can be made useful in three ways:

1. For teaching the direct method of ophthalmoscopic examination. A light and mirror are then used as in examining the human eye. When the tube is adjusted at 0 it will be impossible to read the words on the disk unless the accommodation of the eye of the examiner is fully relaxed. By shortening the distance it can be read with glasses that correct the permetropia. If the distance is increased it will require, to read the letter, a concave glass which corrects the myopia. By substituting the astigmatic lens the circle appears elliptical, and the vertical, or horizontal lines will be distinct or blurred as the axis or disk is changed from one position to another. By using the indirect method of examination it can be clearly demonstrated that the fundus is inverted.

2. For the practice of retinoscopy, or the shadow test. To do this a ring is placed on the front of the tube, with grooves for holding two trial lenses.

3. For demonstrating the principles of refraction. In this case a disk of ground glass is substituted for the metallic disk, and by observing the images formed on it by distant objects, emmetropia, hypermetropia, myopia, and astigmatism, with the effects of their respective correcting lenses, can be clearly shown. By observing the images of near objects, the effects of accommodation are also demonstrated. I have been assisted in perfecting this apparatus by my fellow, Dr. George T. Ball. It may be procured of Meyrowitz Brothers.

Clinical Department.

MAGGOTS IN THE HEAD.

DR. C. M. HARRISON, of Del Rio, Tex., writes that the presence of worms in the cavities of the head, reports of two cases of which he had seen some time ago in THE MEDICAL RECORD, is by no means a very uncommon phenomenon in that country. There are two species of flies which attack diseased parts, viz., the blue-bottle (*musca vomitoria*), and the flesh-fly (*sarcophaga camaria*, Meg). The blue-bottle deposits eggs, which are hatched in two or three hours provided they are kept moist and warm; and the flesh-fly deposits living larvæ, which commence to burrow at once. It was of the latter kind Linnæus said that the larvæ of three females would devour the carcass of a horse as quickly as would a lion. These are popularly known as "screw-worms," and they increase in size with amazing rapidity. The flies deposit their eggs or larvæ in decomposing substances, and it is probably, the writer says, because there is so little decaying animal matter in his country, owing to the dry air, that the flies so often attack diseased tissues in the living subject. Dr. Harrison writes: "The first person I ever treated for larvæ in the nose was a Mexican, a shepherd, about forty years of age, who had nasal catarrh. I visited him one morning and found him apparently unconcerned, partly because he was suffering but little pain at the time, and partly, also, because he had cured and seen cured so many cases of screw-worms in sheep. I immediately injected into the nares a solution of carbolic acid in glycerine and water, syringing the cavity well, and bringing away eight or ten wriggling maggots. I then hoped I had reached them all, but was disappointed, on returning a few hours later, to find my patient suffering considerable pain, with a bloody serum running from his nose. I then changed solutions, resorting to corrosive sublimate, turpentine, tannin, and morphine, using each in turn, but always finding that I had failed to dislodge all the worms. I used first one solution and then another, through the anterior and then the posterior nares, but despite all my efforts the patient died in agony at the end of three days. His features were unrecognizable. The eyes were swollen and closed, and the face was puffed out to a level with the nose, while from the nares a bloody serum was constantly flowing.

"About two months later I was called to see another case in the same house. The patient was a Mexican woman, forty-two years of age. This time, after failing to accomplish much with my injections, I secured consultation, but only succeeded in obtaining companions in my misery. Finally, at the end of the second day, we became desperate and resolved to see what could be accomplished by cutting into the nasal cavities. We found it necessary to keep the woman in nearly a sitting position, in order to prevent the serum, which was constantly

oozing, from running down the throat. The woman had hardly begun to inhale the chloroform when down tumbled a stupefied maggot, fully half an inch long. We thus succeeded in grasping a number with the forceps, and the patient, not yet being fully anæsthetized, felt them coming down through the posterior nares, and as she did so would hawk and roll them forward with her tongue and spit them out. By putting a cork between the molars and using a tongue-depressor we were able, after she became unconscious, to reach into the throat and seize the stupefied worms as they came down. In this way we removed sixty-seven worms. I then used antiseptic and soothing injections, and hoped the trouble was at an end. But my disappointment was great, on returning the next day, to find the patient with both eyes closed by the swelling, picking away an occasional live worm, and suffering severe pain. Becoming desperate, I mixed a half-ounce of pure chloroform with an equal amount of the antiseptic solution, and threw the whole with considerable force into the anterior nares. The woman gave a groan and fell over as though dead, and I waited with some anxiety to learn whether I had killed my patient or the worms. But the woman recovered, and from that time no more live worms were seen. But dead ones innumerable came away in knots of from three to ten for three days, each time that I syringed out the cavity. The woman is alive, but her nose is completely hollowed out and sunken in at the sides, for the septum and turbinated bones have disappeared. Since that time I have always treated the cases in this way, using chloroform first to kill the maggots."

Dr. Harrison relates another case, of maggots impacted in the external auditory canal. There was so much swelling about the entrance that no injections could be used, but by blowing in the fumes of chloroform the worms were killed. Soothing applications were made until the swelling was reduced, and the dead maggots were then syringed away.

[In the case of the woman who recovered with loss of the septum and turbinated bones, we would venture the suggestion that this was the result of pre-existing syphilitic disease. The fetor of syphilitic necrosis would be likely to attract the flies, who would deposit their eggs or larvæ in the nostrils, and the maggots might then complete the destruction of the soft parts. But it is hardly to be supposed that worms could in so short a time eat away and completely destroy the bone tissue.—Ed.]

FIBROID TUMOR OF THE MIDDLE EAR—NEURALGIC PAINS, OTORRHŒA, AND DEAFNESS—REMOVAL OF TUMOR FOLLOWED BY RESTORATION OF FUNCTION.

Dr. C. W. Trueheart, of Galveston, Tex., reported the following case at the meeting of the Texas Medical Association: Laura O——, fifteen years of age, had been subject for over five years, with occasional intermissions, to deep-seated pain and distressing tinnitus in the left ear, accompanied with deafness and a slight discharge. The girl had acquired the faulty articulation, listless manner, and vacant expression of countenance induced by long-continued deafness in the young. On the left side she could hear the watch only when it was firmly pressed against the ear, and the ordinary voice at a distance of two feet. The tuning-fork placed against the head was heard with very slightly more distinctness on the left side than on the right. The Eustachian tube was completely closed. The drum membrane was of a dusky red color, somewhat thickened and irregularly sunken, with a perforation the size of a large pin-head, through which pus was oozing, a little behind the handle of the malleus. On the right side the watch was heard at two inches, and the voice at six feet. The drum membrane was somewhat depressed, the light spot was indistinct, and the Eustachian tube was partially open. There was catarrh of the posterior nares. Treatment appropriate for catarrhal otitis media was adopted, with decided benefit to the right ear, but without any noticeable effect upon the left. A more careful examination now revealed a slight and uniform bulging of the postero-inferior portion of the drum, and a smooth, pale, red body could be seen and felt by the probe through the perforation. The opening having been enlarged, a fibroid tumor of cartilaginous hardness was seen, attached by a broad base to the inner wall and filling up the postero-inferior half of the tympanic cavity. An attempt was made to remove it by the snare, but after cutting half or two-thirds of the way through the base the wire broke. The tumor was afterward seized with the toothed forceps and twisted off. The base was then repeatedly cauterized with fuming nitric acid every two to five days until the last vestige of the tumor had disappeared. An attempt was now made to secure the closure of the membrana tympani by touching the edges frequently with mitigated nitrate of silver fused on the end of a fine silver probe. This was successful beyond expectation, and the membrane was finally restored to its integrity. At the end of three and a half months the patient returned to her home much improved in general health, expression of countenance, and articulation. On the right side the watch was heard at fourteen inches, and on the left at eighteen, while the hearing for the voice was normal, and the tinnitus had entirely ceased.

Progress of Medical Science.

Recovery from Malignant Pustule.—Dr. W. E. Buck records this case (*British Medical Journal*): Mr. F——, aged thirty-one, a veterinary surgeon, experienced on October 6th a stinging sensation at the back of the right wrist. A small bleb was formed, which he scratched off, and there was some tenderness of the elbow and armpit. He had a slight rigor. On October 8th he was seen by Dr. Meadows, who prescribed some salicylate of soda and tincture of aconite, in frequent doses, as his temperature was 104°, and the rigors continued almost the whole of the day. A black eschar began to form on the afternoon of the 8th, and on the 9th it became about the size of a sixpence; its base was red and œdematous, and surrounded by some vesicles in a circular shape. The temperature was nearly 104°; the patient felt cold, and the tongue was foul. I visited the case with Dr. Meadows, and we injected pure carbolic acid under the eschar, using an ordinary hypodermic syringe. Unfortunately we could only introduce a small quantity, as it oozed out in the withdrawal of the syringe, and with it a serous-looking fluid. I dried some of this fluid on a cover-glass, stained it with methyl-violet, and found the well-known bacilli of anthrax. We prescribed large and frequent doses of soda-hyposulphite, and ordered also a large quantity of meat. Under this treatment he rapidly improved. On October 12th we again injected carbolic acid. The temperature came down, and, as the patient said he felt all right, the hyposulphite of soda was reduced to three times a day. The eschar did not finally separate for nearly six weeks, and the ulcer then soon healed. I believe that the main remedy in this case was the injection of pure carbolic acid, a mode of treatment which does not seem very painful. There was a clear history of the disease, which was contracted exactly twelve days before its first appearance, Mr. F—— having examined the flesh of an animal that had died from anthrax.

A Case of Vaso-motor Neurosis of a Rare Form Occurring in a Child.—In the *American Journal of Obstetrics* Dr. Johnston reports the following case: Mary H—— was a healthy infant until she was three months old, when she had recurrent attacks of swelling and redness of the hands and feet, which lasted during a period of three months. When five years old, and in apparent health, she had a return of attacks of the same character. The first indication of them was noticed while she was

at play in the house. The hands became suddenly red, the fingers soon turning white, then livid, and almost black. There was a sensation of pain in the parts involved, with increased sensibility to touch. The swelling lasted some minutes, and gradually passed off. While the child was out the next day the hands and ears became swollen and discolored as before. The color of the hands was bright red, but near the fingers this changed to white, while the fingers were dark purple, or almost black. The temperature of the hands was low, the fingers being very cold. From this date such attacks returned every day in the hands and feet, and in a day or two the end of the nose and the ears were also involved, being swollen, red, then white and cold. She was kept in the house for some time after this, but as she improved she began to go out. The cold air would almost invariably bring on an attack. The treatment at first consisted of warmth to the extremities by cotton-wool and bandages, lead-water compresses covered with oiled silk, and attention to diet. Hot water gave more relief to pain than anything else. Belladonna and ergot were afterward employed. In about three months there was a sudden cessation of attacks, with no return. The diagnosis of implication of the vaso-motor system is based upon the fact that only changes in the calibre of the blood-vessels could bring about the phenomena of sudden swelling, redness, and finally arrest of circulation in the part, with lividity and great coldness; and nothing could so suddenly change the calibre of the vessels except marked and sudden variations in the state of the nerves regulating their contraction and dilatation.

Malarial Urticaria.—Dr. R. De Luca, in a monograph upon the affections of the skin, due to the action of the malarial poison, relates three cases of urticaria in which there was no fever present, but which were evidently due to malaria, and which were promptly cured by the exhibition of quinine.

Large Lympho sarcomatous Tumor of the Tongue.—At a recent meeting of the Royal Medical and Chirurgical Society Dr. Jonathan Hutchinson narrated a case in which a tumor, beginning in early life in the substance of the tongue, had required removal on account of its large size. It had grown until it completely filled the mouth and obstructed deglutition and respiration. It weighed, after removal, several ounces, and was probably the largest tumor of the tongue on record. The operation had necessitated a preliminary tracheotomy and section of the lower jaw at the symphysis, since it was quite impossible to get at the mass from the mouth. The patient was a medical student, aged twenty-two, and the tumor had been growing for twelve years, or possibly much longer; it was painless, and of almost stony hardness. Its surface at one part was covered with papillary outgrowths, but there was not the least tendency to ulceration. There was no gland-disease. The patient was in good health, and the inconvenience caused by the size of the tumor was the only reason for its removal. Careful microscopic examination had been made by Mr. Eve, Dr. Klein, and others, with the result that the tumor was declared to be of a sarcomatous or lympho-sarcomatous nature. This verdict had unfortunately been supported by the final result, for, after about two years of good health, without the slightest symptom of recurrence, a new growth had suddenly developed in the scar, and, increasing very rapidly, had brought about the patient's death. The author, while admitting that the tumor, in its final development, was of a malignant or sarcomatous character, drew attention to certain clinical features which were different from those common to such growths. If not actually congenital, it had begun in very early life, and its growth had been very slow and absolutely painless. The development of coarse papillæ on its surface, without any tendency to ulcerate or fungate, was another feature of peculiarity. He had not been able to find on record any case which corresponded with his own in all its characters, but had met with several which resembled it in its early stages. In one of these, of which a portrait was shown, the appearances on the surface were exactly similar; but in this no tendency to persistent growth was shown, and the patient, a railway porter, aged twenty-three, was still free from any material inconvenience. This, and some other cases, had led the author to believe that the starting-point had been of the nature of a congenital mole, in which other morbid tendencies had been developed later on.

Circumcision a Cause of Reflex Irritation of the Genito-urinary Organs.—For some years Dr. Mastin's attention has been called to the frequency with which he is consulted by persons of the Jewish faith, on account of chronic urethral discharges, irritable urethra, and other affections of the genito-urinary organs. The main factor in these cases is a preternaturally small meatus urinarius externus, which results from the early removal, by circumcision, of the prepuce. The glans penis in a child, being covered by muco-cutaneous tissue, remains in this condition just so long as the same is protected by its natural covering, the prepuce. If, however, the prepuce is cut away at an early age, eight days or even longer, the glans becomes exposed to the rough contact of the child's napkin and other articles of clothing, and the consequence is it soon changes its muco-cutaneous condition, and becomes converted into almost true dermoid tissue; this being the condition in which we find the glans penis of every Jewish youth, as may be easily verified by examination. Since nature has wisely protected the various outlets of the body by a muco-cutaneous surface between the mucous canal and the true skin, we find these orifices remain in a normal and healthy state just so long as the muco-cutaneous tissue is preserved in its integrity. Otherwise, irritation soon runs into inflammation, followed by a deposit of retractile tissue around the orifice, which in time produces a permanent contraction. We see this to be the case in those contractions of the lachrymal puncta, after long-continued inflammation of the tarsal edge of the eyelids; in the mouth after burns or ulceration of the lips; in the anus after ulceration around its verge, and more noticeably true in a contracted meatus which follows a balanitis associated with a long-standing blennorrhagia. In children whose prepuce has been removed there is likewise a deposit of retractile tissue, that results in a contracted meatus. It has been clearly demonstrated that irritation of peripheral nerves produces centric disturbances in the spinal cord through the excito-motor system, which are thence reflected back. Histories of several cases are given in which diverse symptoms, such as incontinence of urine, sexual weakness, and painful micturition were caused by a condition of contracted meatus, and relieved by dividing and enlarging the opening.— *Gaillard's Medical Journal.*

Anisic Acid.—The already long list of new antipyretic remedies has been increased by the addition of anisic acid, a substance obtained from the oil of anise seed. It exists under the form of colorless prismatic crystals, soluble in alcohol and ether. It possesses antipyretic and antiseptic properties similar to those of salicylic acid. It also increases arterial tension. It has, however, a mild toxic effect in large doses, for when it was injected in large quantities into the veins of animals, epileptiform convulsions were caused. It has been employed with success as an antiseptic in the treatment of wounds, and seems, when employed in this way, to exert no poisonous effect.—*Gazzetta Medica Italiana Lombardia.*

Hysterical Sneezing.—Dr. Souza Leite reports a case of hysteria in which the attacks were ushered in by a fit of coughing followed by continuous sneezing. There were about forty sternutations in the minute, and the attacks lasted for several minutes.—*Centralblatt für Klinische Medicin*, August 15, 1885.

ADDISON'S DISEASE IN A BOY TEN YEARS OF AGE.—Professor Monti, of Vienna, has reported the following case: The boy in question was strong and healthy, with the exception of a slight attack of measles, until the age of six; the skin was quite normal in color. In July, 1880, he fell suddenly ill without any apparent cause. He had fever, with morning remissions, pain in the stomach, abdomen, and head, occasional vomiting, diarrhœa, alternating with constipation, and drowsiness, culminating in heavy sleeps which lasted two or three days, and during which no nourishment was taken; on awaking the child was very weak and was excessively emotional. At the end of fourteen days the mother noticed a peculiar yellowish-brown discoloration of the skin of the hands, and this within a few weeks spread to other parts of the body. After about five weeks the fever ceased, and the digestive and nervous disturbances gradually disappeared, but the discoloration remained. In the course of the summer the child had attacks, lasting two or three days, of headache, with vomiting, abdominal pain, and diarrhœa. In October, 1880, the boy had another illness resembling that described, and lasting from three to six weeks, during which the brownish color became darker. The child recovered and remained fairly well until the end of March, 1881, when the mother first noticed that the cervical glands were more or less swollen, and that there was a slight swelling on one of the knuckles. During 1882 the child was much the same; the muscular system was weak, but he was able to go to school. He had two more feverish attacks, one in the spring, the other in the autumn, each lasting about four weeks. The attack reappeared in April, 1883, and Professor Monti first saw the case on May 10th. The child was tall, thin, and weakly built. The hair was silky, a dark blond. The skin of the face, neck, and hands was of a dark grayish-brown color; the sclerotics were of a dirty white; the iris was light gray; the nails white. The skin of the thorax, back, and abdomen was grayish-yellow; the lower extremities were yellowish, the buttocks and perinæum darker. There were several brown spots on the external ears. The mucous membrane of the mouth was of a pale red; that of the lips and cheeks presented several brownish-black spots arranged in groups. The tonsils were enlarged. The mucous membrane of the nose and of the prepuce was pale. The epidermis was everywhere smooth. The glands of the neck were swollen; the tongue was clean; pulse, 80; respiration, 24. The thorax and its organs were normal. The abdomen was prominent; palpation painful, and especially so in the umbilical and ileo-cæcal regions. The liver was normal, the spleen somewhat enlarged. The inguinal glands were normal. The urine was light yellow, acid, of specific gravity 1.017; no albumen or other abnormal constituents; quantity natural. The blood was pale, but there was no apparent increase of white corpuscles. The temperature was normal. The patient appeared in a state of mild nervous excitement; sometimes crying, sometimes laughing. The bowels regular; he slept and ate well. On June 25, 1883, the boy had one of his usual feverish attacks, and was attended at his own home by Professor Monti's assistant. He slept almost continuously the first four days, and was quite undisturbed by the numerous flies that settled on his face. When roused, he gave his answers slowly but correctly. The pupils were equal, reacting normally to light; there was no strabismus. On sitting up the patient swooned. The glands of the neck were more enlarged. The abdomen was retracted; both hypochondria, but especially the right, were tender on pressure. The urine was normal. Within fourteen days the symptoms had subsided, and the child returned to school. On March 7, 1884, the headache, dulness, and weakness reappeared, and were followed in the night by excitement, delirium, and occasional loss of consciousness. Soon after midnight the child became somnolent, and toward morning death ensued upon an eclamptic fit. At the post-mortem examination the dura mater was found tense, thin, and hyperæmic, its inner surface shiny and smooth. The longitudinal fissure was filled with fibrinous masses. The brain-substance was soft, not congested. The posterior horns of both lateral ventricles were distended with serum. The heart was flabby, and of a dark brown color; the valves were healthy. The right lung was partly solid at the apex. The liver was enlarged and softened. The spleen was enlarged. The mesenteric glands were as large as hazel-nuts. The right suprarenal capsule was completely wanting, as well as its artery and vein. The left suprarenal capsule was very small; the greater part of its substance appeared to consist of rather vascular connective tissue. The kidneys were correspondingly large and somewhat softened.—*London Medical Record*, August 15, 1885.

ORCHITIS OF GOUTY AND OF MALARIAL ORIGIN.—Dr. Guyot recently read at the Société Médicale des Hôpitaux of Paris, the history of a peculiar case of orchitis. The patient was an arthritic, whom he had previously treated for a rheumatic affection and a diathetic gastralgia. There were no syphilitic antecedents. The patient was placed upon an anti-arthritic treatment, under which the testicle greatly diminished in size, but at the same time the great toes of both feet and the wrist became the seat of a well-marked gouty arthritis. Dr. Guyot does not hesitate to consider the affection of the testicle as a gouty orchitis, but he has failed to mention the occurrence of rheumatic orchitis, instances of which are not rare and which bear a strong analogy to his observation. Dr. A. Zacco reported, in a number of the *Centralblatt für Klin. Med.*, 1884, the case of a man, aged thirty-five years, previously in good health, who had an attack of orchitis on the right side, with a complicating epididymitis, without having had any venereal disease or any affection of the urinary organs. After this the patient had intermittent fever for three months, complicated with tertian, and later with quotidian, and finally a continuous fever set in with orchitis. Every method of treatment was used without resulting favorably. But after it was discovered that the continuous fever reached its acme about noon, large doses of quinine were administered on the fourth day, and in two days the patient was very much better. It was observed that at the height of the fever there were slight swelling and pain of the testicles, which, however, completely disappeared with the fever. Zacco believes that the orchitis was due to the direct action of the malarial poison upon the testicles.

BENZOATE OF SODA IN THE SUMMER DIARRHŒA OF INFANTS.—Dr. Gnasta regards this disease as a zymotic affection, due to the presence of a special microbe. The predisposing causes are a defective hygiene and excessive heat, and the exciting cause, indigestible food. He has used benzoate of soda with success, giving about one drachm dissolved in three ounces of water in the twenty-four hours. A dose of calomel or jalap is given at the commencement of the treatment, and on the third day a slight purgative action is again obtained by the administration of magnesia. Fasting is enjoined during the treatment, no milk nor beef-tea being allowed, but only a few spoonfuls from time to time of lemonade, or good wine. Nursing children must, however, be given the breast, but not more than four times in the twenty-four hours.—*Journal de Médecine de Paris*, August 23, 1885.

THE MICROCOCCUS OF INFECTIOUS VULVO-VAGINITIS IN CHILDREN.—In a paper read before the Society of Physicians, in Buda-Pesth, Dr. Cseri reported the results of his investigations in this disease. He had examined the vaginal secretion in upwards of thirty cases occurring in girls between three and ten years of age, and found constantly a micro-organism which seemed, both in its microscopical appearance and in its action in cultures, to be identical with the gonococcus of Neisser. The following were the author's conclusions (*Centralblatt für Klinische Medicin*, August 8, 1885): 1. A large porportion

of cases of so-called catarrhal vulvo-vaginitis, especially the chronic forms, are distinctly infectious. Whether those cases occurring after the exanthemata are also infectious cannot yet be definitely asserted. 2. In the secretion in the infectious form there is always present a characteristic coccus, which in its form, size, and action in culture fluids, is not to be distinguished from the gonococcus. As regards the question of its pathogenic nature and its identity with this specific coccus, further investigations with pure cultures are necessary. 3. Vulvo-vaginitis is exceedingly contagious, and there is great danger to the eyes if any of the secretion is brought in contact with the conjunctiva. 4. Infection is carried through clothing and bed-linen, public bath-tubs, etc. Prophylaxis consists in isolation of children affected with vulvo-vaginitis and in disinfection of the underwear.

Intratracheal Injections.—Some experiments made by Dr. Pernice show that liquids injected into the trachea drop by drop, or in little jets, run down the posterior surface and are thence evenly distributed throughout all the bronchial twigs. They are then absorbed by the pulmonary veins or by the lymphatic vessels, and thus exert both a local and a systemic action. When the animal was placed in the supine position, with the head elevated a little, no cough was excited by the operation. Dr. Pernice used in his experiments distilled water, milk, and defibrinated blood. Absorption was complete, and no respiratory trouble of any sort resulted. He also employed solutions of tannin, borax, benzoate of soda, quinine, morphine, and nux vomica and lime-water, without exciting any reaction in the respiratory mucous membrane.—*Il Movimento*, No. 12, 1885.

Malarial Colic.—Dr. F. Sancho relates the case of a woman, aged twenty-seven, of good health, married, and the mother of two children, who became pregnant for the third time. She complained first of loss of appetite and of a bad taste in the mouth, and later suffered from colicky pains and vomiting. These came on every evening between four and six o'clock, lasted for a few hours and then subsided, and were succeeded by profound and tranquil sleep. The tongue gave no evidences of catarrh of the digestive tract, and indeed there were no dyspeptic symptoms of any kind except during the times mentioned. The symptoms were referred to the woman's condition, and it was thought that they would disappear after the birth of the child. However, after a time the patient was taken with a heavy chill, accompanied with intense abdominal pains, and soon abortion occurred. That same evening the gastric pains and vomiting returned just as before. Anti-dyspeptic treatment was tried, but without any improvement resulting. Then, thinking that malaria might be the cause of the trouble, Dr. Sancho prescribed quinine, and the patient was speedily cured.—*Revista de Medicina y Cirurgia Prácticas*, July 7, 1885.

Sunlight as a Disinfectant.—At a recent meeting of the Academy of Science of Paris, M. Duclaux detailed the results of some experiments which he had made to determine the effect of sunlight upon the vitality of microbes. He found that a few hours of exposure to the direct rays of the sun were sufficient to weaken, and finally to destroy, the pathogenic micrococci used in the experiments. He argued, therefore, that the sun was the best disinfectant which we possess, the most universal, the most economical, and the most active.—*Le Progrès Médical*, August 15, 1885.

Retention of Urine in a Child Six Months Old.—M. Arnozan relates in the *Journal de Médecine de Bordeaux* the case of an infant, six months old, in apparent good health, who was suddenly seized with retention of urine. Previous to this time he had always passed water without difficulty and in sufficient quantity. No urine passed for thirty-six hours, although the child made ineffectual straining efforts. The bladder could be felt as a tense ball in the hypogastrium. The testicles were drawn up into the abdomen and could not be felt in the scrotum, but nothing abnormal could be discovered to account for the retention of urine. The water was drawn without difficulty through a filiform elastic catheter. There were about four ounces of clear though dark-colored urine. The child was put upon small doses of potassium bromide, and after the water had been drawn for about twelve days, it began to flow normally, and has since continued to do so, though the child has always a temporary difficulty in urinating whenever he is a little indisposed.

Nasal Polypus in an Infant.—M. Krakaver exhibited before the Belgian Academy of Medicine a child who when only four and a half months old was brought to him on account of a trouble of the nose. He removed twelve polypi from the right nasal fossa, cauterizing the mucous membrane with nitrate of silver. Mackenzie states that the youngest child whom he had seen affected with nasal polypi was sixteen years old, and Semon mentions having observed one twelve years of age. The case reported by M. Krakaver would therefore seem to be exceptional as regards the age at which the disease appeared.—*Revue Médicale*, August 22, 1885.

The Relations between Diseases of the Abdomen and those of the Right Heart.—Since the work of Potain in 1878, and the researches of Tessier and Franck in 1879 and 1880, this question has received little attention. Passerini now cites three cases of tricuspid insufficiency consecutive to a peritoneal effusion. Auscultation showed a prolongation of the first sound and a murmur; the second sound being found strengthened toward the pulmonary orifice. The disappearance of the effusion was accompanied by the disappearance of these sounds. Passerini believes the cause of these cardiac alterations to be purely mechanical; the compression of the abdominal viscera provokes venous anæmia, and engorgement and hyperæmia of the thoracic organs. In favor of this explanation we have the observations of Larcher and of Depaul in pregnancy. These writers have noted the accentuation of the first sound toward the pulmonary orifice, at the same time that it is prolonged at the level of the base of the xyphoid cartilage. The same observation has been made in two cases of ovarian cyst, and in another of large abdominal tumors; and finally, this same modification of the first sound at the pulmonary orifice can be produced by simple compression of the abdominal wall.—*Revue Bibliog. des Scien. Méd.*, July 31, 1885.

Hydræmia and Hydræmic Œdema.—The relation of œdema to diminished concentration of the blood is a subject that is still open to debate. Professor Salvioli has recently made an experimental study of the question (*Archive delle Scienze Mediche*) which goes to show anew that dropsy depends upon a variety of conditions. It is connected firstly with the hypo-albuminotic state of the blood, conjoined with hydræmic plethora; then with the physiological or morbid constitution of the vessel-walls; lastly, with the degree of pressure and tension of the blood in the vessels. This last factor has great importance in the production of hydræmic œdema, and regulates its degree and disposition according as in simple plethora, or in hydræmic plethora, the energy of the cardiac contractions is augmented or enfeebled. Only in hydræmia consecutive to acute nephritis there is observed constant elevation of the blood-pressure, which is maintained by the hypertrophy of the left ventricle. In this first stage œdema occurs, which may be called active, localized especially in the skin, that is, in the point where in man there exists the greatest permeability of the walls of the vessels. In the later stage, common so-called passive œdema occurs instead, which resembles in its disposition the œdema of heart disease, and is dependent on altered nutrition of the myocardium, and consequent lowering of the arterial pressure and increased tension in the venous system.

JAUNDICE AND PAIN IN BILIARY COLIC.—Dr. Lawson Tait, in the *Lancet*, discusses the reason why, during the passage of gall-stones, there is frequently no jaundice. In fifteen cases of cholecystotomy he found no history of jaundice, and Dr. Tait has found that the occurrence of jaundice, either in the skin or in the urine, during and after the passage of gall-stones, is of extreme rarity, and not, as has been believed, common. Dr. Tait seeks for an explanation of this fact in the following anatomical conditions of the cystic and common ducts. The common duct is not so long (three inches) as most text-books assert, and is much less rigid and more easily dilatable than the cystic duct, which is larger than most of the text-books describe it, viz., one inch. Hence we can understand how a stone, if not of very great size, will cause intolerable agony while passing through the unyielding cystic duct, and without a trace of jaundice ensuing, the gall-bladder alone being its propellent force; but the moment it enters the common duct the extending impulse will be increased by the influence of the whole excreting force of the liver, so that its passage through the common duct is more rapid. The chief symptom, then, that of pain, is due to the slow passage of the calculus through the unyielding cystic duct, while its rapid passage through the easily distended and much larger common duct gives no time, in the majority of instances, for the production of jaundice, which only takes place after long-continued obstruction of this, the common duct.

EPIDEMIC PURPURA.—Dr. Guelliot (*Annales de Dermatologie et de Syphiligraphie*), observed, in infants between the ages of seven months and three years, three cases of purpura. The eruption was preceded by convulsions, vomiting, and intense dyspnœa, then coma, and, in one case, acute pain in the lumbar region. After a few hours purpuric spots appeared symmetrically on the anterior and inner surfaces of the thighs, at first dull in color, then turning successively a bright red, purple, and finally black. In the three cases the course was rapid, death occurring after fourteen, fifteen, and twenty hours from the onset. The illnesses were attributed to unhealthy conditions of the street in which the children lived.

DEEP MASSAGE OF THE ABDOMEN IN INTESTINAL OBSTRUCTION.—Dr. Kriviakin (*London Medical Record*, August 15, 1885) warmly recommends deep massage of the belly as a powerful curative in cases of intestinal obstruction. The procedure, as practised by him, "requires only one assistant, the name of which is Patience," and consists in the following: The operator anoints his hands with oil, separates the thumbs as much as possible from the first fingers, puts the thumbs in juxtaposition, places the hands at the lower part of the belly (the patient lying on his back), and, while producing steady and strong pressure, passes his hand first from downward upward, then *vice versâ*, then from the right to the left, and so on, repeating the manipulations for twenty minutes, by the end of which time "a regular peristaltic storm is set up within the abdomen." Then the patient (who at the beginning of a sitting feels rather uncomfortable, but in about ten minutes commences to experience distinct relief) is left alone for the next hour and a half, when another sitting of deep massage for about fifteen minutes may be tried. As a rule, however, one sitting is sufficient for producing stools. It happens very often that in the course of the manipulations a distinct, usually elongated, sausage-like tumor may be felt in the belly. If this be the case, fairly strong tapping at the spot of the tumour should be added to the shampooing, each stroke being finished by a strong localized pressure. According to the author, deep massage is indicated in intestinal obstruction of every kind and description. He adduces the details of four cases of the affection met by him lately among Dagestanese, and treated after this energetic plan (very energetic, indeed, especially in comparison with foul eggs or a cock's excrements, with which obstructed patients are usually treated by numberless native medical men, so-called *khakims*). One of the cases was that of a strongly built man, aged twenty-four, with constipation of ten days' duration, agonizing paroxysmal abdominal pain, fetid vomiting, obstinate hiccough, offensive eructation, and moderate distention of the belly. A volvulus (caused by severe physical exertions soon after a liberal meal) was diagnosed, and deep massage was resorted to after a large enema made of a weak infusion of tobacco-leaves. In about ten minutes, after a sitting of twenty minutes' duration, very profuse and extremely offensive defecation followed; later on, the patient's bowels were moved five times more. In another case, where constipation of eight days' duration and fecal vomiting were present, deep massage was performed twice, with an interval of one hour, defecation ensuing during the second sitting. In the third case, with eight days' obstruction and obstinate hiccough, recovery followed after the simultaneous use of deep massage, large enemata, and cold compresses. Less fortunate was the issue in a fourth case, that of a weak, decrepit man, aged fifty-five, with constipation of twelve days' standing, filiform pulse, fetid vomiting and eructations, cold viscid perspiration, and a semi-comatose state. Though regarding the case as a hopeless one, the author still decided to try massage, after the previous administration of two grains of camphor and a high effervescent enema. In about half an hour after the manipulations, a free discharge of hard fecal lumps, suspended in fluid, ensued. But collapse became worse, and five hours later the old man died. No necropsy was allowed.

THE DISTRIBUTION OF THE BLOOD IN THE SYSTEM.—Dr. Spehl has instituted a series of investigations having for their object an inquiry into the amount of blood contained in some of the principal organs during life, also to establish experimentally the invariableness of these quantities or their fluctuation in correspondence to varying states of these organs; in the latter case to ascertain when and how they vary within physiological limits; and finally to draw certain practical deductions from his observations. The results obtained by the author may be briefly given as follows: (*London Medical Record*, August 15, 1885) *Lungs.*—1. During inspiration these contain about one-thirteenth of the total amount of blood. 2. During expiration about one-eighteenth. (These experiments were made on rabbits.) 3. These values are not influenced by varying pressure in the heart during normal respiration. 4. An insufflation of compressed air in the trachea, the external pressure remaining the same, drives the blood contained in the lungs out, so as to reduce its ratio to one-sixtieth. In connection with his study of these organs, the author has also investigated the effect upon the pulmonary circulation of residence in and ascent to high altitudes, and has come to the followiug conclusions: (*a*) During a sojourn in a rarefied atmosphere the division of the blood is physiological, and consequently the same as at the sea-level. (*b*) During ascent there is a tendency to congestion of the lungs, and, *cæteris paribus*, this congestion is the more marked and persistent the more rapid the ascent may be. *Brain.*—During the waking state this organ contains on an average one-eighth of the total mass of blood, during sleep the one-twelfth. *Muscles.*—These contain more blood during contraction than during repose. One-sixth to one-tenth of the total mass are the extreme figures found.

THE PHARMACOPŒIAS OF DIFFERENT COUNTRIES.—According to Robert, the French pharmacopœia contains the names of two thousand different preparations, while that of Norway has but five hundred and thirty. The United States come seventh on the list of sixteen. Russia and the Latin races would appear to have the greatest fondness for, or faith in, drugs; while the German and Scandinavian peoples, to judge from the comparatively small number of articles in their pharmacopœias, are much less given to dosing.

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THE CHOLERA CONFERENCE IN BERLIN.

THE report of the second conference upon cholera, held in Berlin in May of the present year, has been published. The discussion was almost interminable (the report of it fills seventy-seven closely printed pages, somewhat larger than a page of THE MEDICAL RECORD, and is issued as a supplement to the *Berliner Klinische Wochenschrift* for September 14 and 21, 1885), but it lacked the interest of the one of last year, as there was little of novelty developed during its progress. The first subject for discussion was the new discoveries made since the last session regarding the cholera bacteria, especially as to the forms under which they preserve their vitality. Koch spoke at great length, and defended his position against the attacks which had been made on him by Klein, Finkler and Prior, and others. He endeavored to show that their methods of investigation were faulty, or that they had not been able to distinguish between his bacillus and other forms of microbes. As to the claim of priority made for Pacini, he thought it very doubtful whether this observer had really seen the true cholera bacillus, and said that he himself had never heard of the alleged discovery until long after he had published the report of his own investigations. In discussing the question of disinfection, he expressed his decided preference for carbolic acid over any of the metallic salts. The speaker said that a permanent form of the cholera bacillus had not yet been discovered, and perhaps there was none. But such a form was unnecessary, since the bacillus would live in moist earth for five months or longer when the conditions were otherwise favorable. A discussion then ensued between Koch and von Pettenkofer, the latter maintaining that the characteristics of the different cholera epidemics furnished conclusive evidence that the cause of the disease could not reside in a specific bacillus. He thought that cholera was no more contagious than was malaria. The question of experiments upon animals was also discussed, but without developing any points of especial interest.

The second and third points proposed for discussion were that of the spread of the disease through pilgrimages and by ships, and the influence of the soil, air, and water upon this spread. Koch said that the facts in support of the view that the disease was spread by human intercourse were incontrovertible, and he thought that there lay a danger to Europe in the railways now being built in Central Asia, on the completion of which India and England would be separated by a journey of only eleven days. He expressed himself further as of the belief that one attack of cholera confers immunity against subsequent attacks, at least temporarily. He explained in this way the fact that cholera is spread in waves along the paths of human travel from its endemic seat toward Northwest India. Each epidemic in these parts, he said, left behind it an immunity which existed for three or four years. At the end of that time the communities were no longer protected, and another invasion of the disease occurred. Bryden had called attention to this periodic overflow of the cholera, but had wrongly attributed it to the influence of the monsoon. Koch thought that the history of an epidemic on the ship Matteo Bruzzo was a sufficient answer to von Pettenkofer's theory. In this case the disease appeared on the thirty-fourth day, and the last case declared itself on the fifty-second day after the vessel had left port. If now the contagium could exist only in the ground, the ship not having touched land since starting, it was necessary to believe that the incubation period of the disease was from thirty-four to fifty-two days in length. The speaker thought that immediate contagion was rare, but the intervention of clothing or some other suitable soil for the development of the bacillus was necessary. Virchow said that, as far as he was aware, no facts were in existence in proof of the theory that cholera germs could be carried directly to man from the soil, as could the malarial poison. He thought, however, that the opposing sides in this controversy could reach some agreement if one would admit that cholera bacilli could grow in the earth and the other that they could grow in agar-agar and in soiled clothing.

Then Koch spoke at great length against the assertion that the rise or fall in the level of the sub-soil water bore any relation to the severity of an existing cholera epidemic. Von Pettenkofer defended his views on this point at equal length, but no new arguments were brought forward on either side.

The last question brought forward for discussion was that of the measures proper to be taken against the cholera, but here, as elsewhere in the conference, nothing new was developed. Koch enumerated various measures of disinfection, cleanliness, thorough cooking of food, etc., and repeated that he considered carbolic acid as the most practicable disinfectant which we have at our disposal. Virchow remarked that if a strict quarantine were possible, as, for example, on an island, he would be in favor of it, but he regarded a land quarantine as wholly impracticable. Von Pettenkofer said that when the cholera visited Bavaria in 1836, it was universally regarded as non-contagious, and people acted upon this belief. Of course there was no disinfection, but further than that no especial efforts were made in the direction of cleanliness, and no attempt was made to isolate the sick. Yet, notwithstanding all this, Bavaria, and especially its chief city, Munich, had never been visited by so mild an epidemic as this. He thought that even if measures of thorough disinfection and isolation could not be carried out, there was no occasion for alarm or special anxiety. The question of the diet of individuals in time of an epidemic was broached, but Koch said that as yet no special rules could be laid down.

In the course of his remarks Koch took occasion

several times to attack Cunningham's views, and said that these were not held by many of the other medical men in India, but that they were afraid to express their real convictions if opposed to those of Cunningham, as they would be in danger of losing their positions. Von Pettenkofer defended Cunningham's character, but Koch repeated his assertions several times. If these charges be true, their public statement may lead to a reform in the Indian Medical Service, and then the second cholera conference will have accomplished something after all.

After an exchange of compliments and of apologies for any acrimonious remarks dropped in the heat of debate, the members bade adieu one to the other, and the conference was at an end.

Besides those mentioned, Kersandt, Fränkel, Pistor, Günther, and others participated in the debates.

A WORD OF ADVICE.

At this season of the year our city receives a material addition to its population, classified under genus, student —species, medical. We trust that all the gentlemen included in this category have come to the metropolis with a zeal for study, with habits of perseverance, and with a desire to do creditable work. This new body will contain many recent college graduates as well as those whose previous scholastic privileges have been more scanty. May we offer to both classes alike a word of advice, which we hope they will heed? To both alike it may not come amiss, for the evil against which we would warn them is rife in undergraduate as well as professional schools. Many acquire it early in their course of study, and despite their efforts to emancipate themselves, they remain in perpetual bondage. We would name this evil —lack of independence in study.

By a man of independent scholarship we understand one who relies on text-books and lecture notes for only an outline of what to study, who regards them as only a means to an end. He may not be a genius. He may be below the average. He does not accept facts, however, unless he understands their relation to other facts; in short, he assimilates what he studies. Hence his armamentarium, small though it may be, is yet brightly polished and ready for instant use. He may graduate at the foot of his class, but he has learned to think readily and accurately. Such thought leads to decisive action. He has within himself the elements of assured success.

Contrast with him the man who relies wholly on text-books and lecture notes, who does not develop a single independent sturdy idea.

He may stand high at the final examinations, but he lacks real mental vitality. He has not developed that "emergency" element so prominent in action in the life of a physician. He has laid narrow foundations and has not a warranted self-confidence. Many men are now about to begin their course of medical study. Hundreds have come to New York for the first time. To all of them we would give this exhortation, "think for yourselves." Be no man's servile imitator. To do independent work requires courage. There are many difficulties to be overcome. Many apparent contradictions will require reconciliation. If these ends cannot be attained after reasonable exertion, let a clue be given by the instructor. It is his business to aid the student by the development of the latter's mental resources. Then when the student lays aside any work as finished, he is able to give a reason for the hope that is within him. "That's right, why?" is a frequent class-room expression of a professor of mathematics, in one of our leading universities. The phrase illustrates the spirit in which all true study should be conducted.

Most men make the mistake of attempting too much the first year. Anatomy, physiology, chemistry, and physics alone are a sufficient task for the majority, especially if laboratory work in these branches be followed in addition to the lectures. Of course the amount of work which can profitably be undertaken depends on a man's previous experience, but we would earnestly advise that all the spare time of the first year be devoted to anatomy. This subject is at examination time the student's bugbear, primarily because he did not at the outset recognize its relative importance and did not govern himself accordingly. It is a difficult subject to learn and an easy one to forget, because from its very nature the greater part of it is purely arbitrary and has to be learned by rote.

One word more in regard to clinical instruction. There is a fascination about attending clinics, but it is simply a waste of time until a man has by study fitted himself to appreciate them. Otherwise, having eyes, he sees not; having ears, he hears not. Clinical instruction will come in due time, but it is strong meat not adapted to the milk age.

A most praiseworthy aim it is to shape one's course as to compete for a hospital position upon the attainment of a degree. The competitive examinations for these positions are free from many restrictions which cluster about college examinations. The best man wins, and he is rightly adjudged best who can answer practical as well as theoretical questions; who is, to use a common phrase, the best "all-round" man. This status of scholarship is not attained by servile study, but by fearless, independent thought. One need not despair of success. There are, we believe, more good hospital positions offered here every year than there are thoroughly first-class men to fill them. Thus, with such a combination of theory and practice will a man go forth into the world conscious of his own mental integrity, confident in his own powers, and bound to do well. He has laid a firm corner-stone, the superstructure will be solid and permanent.

THE REUNION OF THE PROFESSION ON THE MATTER OF CODES.

In an address delivered before the New York Academy of Medicine, and published in the Medical Record of October 3d, the learned President takes occasion to offer congratulations upon the prospective reuniting of the profession on ethical issues. He refers to the explanatory declaration of the American Medical Association made at its last meeting.

This declaration sets forth that, no emergencies or circumstances can make it necessary or proper to *enter into formal consultation*, with those "who assume a name indicating to the public a sectarian or exclusive practice, or belong to an association or party antagonistic to the

general medical profession." The declaration also states that the National Code "does not exclude from professional fellowship on the ground of differences in doctrine or belief;" nor is there any article "of said Code of Ethics *that interferes with the most perfect liberty of individual opinion and practice.*"

Dr. Jacobi shows with natural satisfaction the close resemblance between the principles set forth in this declaration and those of the Code of Ethics of the Medical Society of the State of New York. He says:

"After these resolutions had been passed in New Orleans, many of the professional men who always persisted in adhering to the Code of the American Medical Association, were of the honest opinion that they had, by accepting them, removed every discrepancy of opinion or difference of action on the part of those adhering to either the Old or New Code. For it is true that the explanatory declaration of Chap. II., Art. IV., Sec. I., exhibits a great resemblance to the New York Code of 1882. For the Medical Society of the State of New York it must be a source of intense gratification to be convinced, by the passing of that declaration, that a few years have sufficed to so change public opinion as to oblige even the American Medical Association to recognize the justness of most of the New York proceedings. Upon this result the New York State Society can but be sincerely congratulated, and the spirit of equity and justice, as displayed by the Committee drafting the explanatory declaration, must be commended."

We trust that Dr. Jacobi interprets rightly the spirit exhibited by the framers of the declaratory resolution. It certainly seems that under its provisions regular physicians can meet in formal consultation many who hold to the doctrine of homœopathy, and can meet in cases of emergency, though not "in formal consultation," any legal physician who seeks their services. In other words, the hard and fast rule—which has been tacitly if not formally upheld—forbidding consultations with all homœopaths, is set aside. There is, in fact, given "the most perfect liberty of individual opinion and practice" to the members of the American Medical Association.

There can be no doubt that the medical profession is gradually reaching complete harmony on the subject of its relations to irregular practitioners. No one will again be punished simply for consulting with a homœopath, or eclectic; but the whole drift of professional feeling will be more strongly than ever set against associating with men who are believed to be dishonest, ill-educated, or quacks.

THE HEALTH AND FERTILITY OF EDUCATED WOMEN.

An instructive report upon the health of college alumnæ has recently been published. It is based upon statistics collected by a Special Committee of the Association of College Alumnæ, of whom Miss Annie G. Howes is Chairman. Circulars of inquiry were issued to one thousand two hundred and ninety alumnæ, and answers from seven hundred and five of these were obtained. The colleges in which the higher education was bestowed were twelve in number, and included Vassar, Smith, Wellesley, Cornell, Oberlin, and Wisconsin. The history of the seven hundred and five is briefly given as follows: The average age at which they began to study was 5.64 years, at entering college 18.35 years, and the average present age is 28.58 years. During college life the majority studied but moderately, and only forty-four per cent. did not worry over their studies or affairs. Since graduation all seem to have found congenial occupation, a great many as teachers, while eight only are occupied with social duties to the exclusion of other occupations. Somewhat over one-fourth have married, and of the whole number of children borne by them the greater part are living and in good health. On entering college 78.16 per cent. were in good, 1.98 per cent. in fair, and 19.86 in poor health. Since graduation the percentages are 77.89, 5.11, and 17.02, respectively. In other words, 138 report a deterioration in health, 418 have had no change, and 149 show an improvement in health. The most prevalent cause of disorders is constitutional weakness. The present health of graduates seems to have been affected according as their parents have enjoyed either good or poor health, the figures showing three per cent. increase in health for those whose parents were both in good health, and a decline in health of over seventeen per cent. for those whose parents were both in poor health. For those who entered college at sixteen years of age or under, an increased deterioration in health of between ten and eleven per cent., as compared with those who entered at a later age, is observed.

The conclusion from the above is that which any observant physician would independently have drawn, viz., that the health of women is not much affected either one way or the other by an American college education. We know no especial reason why any deterioration should be expected, and we confess that, so far as this point is concerned, the statistics will have their chief value in the relief of lay prejudices.

It may as well be borne in mind, however, that out of some ten millions of women in this country, there are less than two thousand who have received a classical education, and it is very safe to say that those who have won this distinction are not exactly types of the average woman. Even if they were, however, it is rather straining a point to speak of our college alumnæ as "highly educated," simply because they have gone through an American college for women. It is the later and harder struggle for technical and professional learning that breaks down the aspirant for a real education. This later struggle our college alumna rarely enters, but she becomes a school-teacher, and that ends her.

Some interesting facts are brought out with regard to marriage and fertility. Of the 705, only 196 or 27.8 per cent. are married. Of those married, 66, or over one-third, have had no children. The remaining 130 have had 263 children, of whom 232 are living. This gives an average of two children per family, the parties having been married on the average six to seven years. It will be seen that the college education of women does not as yet promote connubiality or fecundity.

Some interesting facts are given regarding the establishment of the menstrual function. The average age at which this was established in 705 women, was 13.62 years. There were 169, or 23.97 per cent. only, who

reported having experienced no trouble during the menstrual period.

Nervousness appears to be quite common (in 333 out of 705), although in the great majority of cases it had nothing to do with education. Indeed, education properly conducted tends to lessen nervousness.

One more fact of interest, if not of significance, and we conclude our review. It appears from the tables that the 361 who began study at or under five years of age, give about the same report as to health as do the 328 who did not begin study until later.

DECLINE THE INVITATION.

THE month of grace allowed for the return of the gentlemen who withdrew from the organization of the Ninth International Congress has passed. There are no signs, yet of the hoped-for return.

The possibility, as suggested by us last week, of affecting in some way the ruinous course of the present Committee, is now destroyed by the recent action of the Executive Committee, which has formally assumed dictatorial powers.

We think, therefore, that it would be better, for the credit and harmony of the profession, that the acceptance of the invitation to hold the Ninth International Medical Congress in this country be withdrawn.

CHEAP DYING.

THE cost of cremation by the new company in this city, it is said, will be only twenty-five dollars. The fact that a person dying in New York can have suitable mortuary rites performed for the comparatively small sum of twenty-five dollars is most interesting, and will, we feel sure, do much to rob death of its terrors. The company, indeed, promises to open up a new era in municipal mortuary history; for while there has been a great deal said and written here about cheap living, we have heard but very little of a serious and practical nature about cheap dying. Dying in New York is a luxury, and one about which most people show a strange amount of thoughtlessness and inconsideration. A citizen can live three years in Arkansas for the price of a conventionally respectable interment in New York. Yet few take such a fact as this into the slightest consideration in consenting to a demise. We are, indeed, acquainted with one conscientious old Irish woman, with a complication of diseases, who faithfully attends her Dispensary, because she is "on her relations," and she knows and admits that they cannot afford to bury her.

Such a spirit deserves a historical record and wide emulation. The fact is, we are much in need of a Society for the Cultivation, not of plain living, but of Plain Dying. In these hard times it is often little less than criminal that a man subject his estate to the prolific expenditure of a funeral. We have heard of a gentleman who, at the solicitation of his wife, gave up tobacco and thereby, in the next fifteen years, saved over five hundred dollars, which all went at last for his burial expenses. Here was certainly a disproportion between effort and its result that is most painful to well-balanced minds, and very disheartening to the anti-tobacco propaganda.

We do not advocate extremes, however. It appears quite possible that if a person can die respectably for $25, not only is final dissolution within the reach of all, but it may even be a positive temptation, and lead to the cutting off of a large amount of agreeable, not to say lucrative, invalidism. The whole matter of cheap dying, in fact, needs much further discussion. At present the subject is in a state of painful confusion, reminding one, in this respect, of the Germ Theory, and of the Ninth International Congress.

News of the Week.

THE FIRST MEETING OF THE EXECUTIVE COMMITTEE of the possibly International Medical Congress, was held in this city, on September 24th, ten of the twenty-one members being present. Dr. Henry H. Smith, was elected Chairman; Dr. F. S. Dennis, Secretary. The latter gentleman was also elected Associate Secretary-General.

The Committee does not seem to have done anything except to pass a declaratory resolution emancipating itself from the authority of the American Medical Association, as follows:

"*Resolved*, That this Executive Committee enters upon the management of the affairs of the Ninth International Medical Congress, with the understanding that, in accordance with Rule No. 10, its powers are not restricted, except by the rules and regulations adopted September 3, 1885, by the Committee of Arrangements appointed by the American Medical Association in April, 1885; and that the actions of this Executive Committee are final, not being subject to revision, amendment, or alteration by either the Committee of Arrangements or the American Medical Association.

It is rather unfortunate that the original committee did not think to adopt some such resolution as the foregoing.

A NEW JOURNAL.—The *Cincinnati Medical and Dental Journal*, is the title of a new monthly journal, published in Cincinnati. It is edited by Dr. Sage and Dr. Thrasher; and so we expect that it will show wisdom and concussive vigor.

THE ORIGIN OF THE MONTREAL EPIDEMIC is believed by many to be as follows: In the month of March, 1885, the city having been free from the disease for three years, a conductor in the employ of the Pullman Palace Car Company arrived from Chicago and was taken to the Hospital Hotel Dieu with an eruptive disease. He was placed in a ward with other patients, and, as it afterward was ascertained, passed through the stages of a mild case of variola. A nurse, who took care of this conductor, contracted small-pox and died. In this manner the present epidemic had its origin, according to the statements of the Board of Health. It is quite possible, however, that the disease existed in Montreal previously and was unknown to the Board of Health. In the month of April, 1885, the pest-house of St. Roch was opened and there were 6 deaths. In May, 10 died of the disease; in June, 13; in July, 46, and in August there were 241 deaths. In the early summer the venerable Bishop of Montreal, M. Borget, was gathered to

his fathers, and his public funeral was attended by thousands of the faithful. Coming as many of them did from tenements reeking with pestilence, the contagion was disseminated among the immense concourse of those who were in the church, and a marked increase in the death-rate was at once apparent. Since September was ushered in the death-rate has climbed to its present proportions, and the returns for the month will show a mortality of upward of 1,200 from the grisly destroyer. The seat of the pestilence is in what is known as the East End. Montreal, like most other cities, has its court end and its poorer section. The English-speaking population inhabit the western portion of the town, with the mountain for a background, while the French inhabitants almost exclusively reside in the immense district lying east of the big stone municipal palace on the Champs des Armes.

The Preventive Inoculation of Yellow Fever seems to be suffering from the same marasmus as does the preventive inoculation of cholera. In a session of the Imperial Academy of Medicine on September 14th, at Rio de Janeiro, Dr. Araujo Goes claimed to have shown Dr. Freire microscopic preparations of earth taken from his yard, on the Praia de Flamengo, in which was the bacillus discovered by Dr. Freire. Dr. Goes further states that Dr. Freire having failed to discover the sporuliferous cells (*cellulas sporadulas*) in the preparation, he sought for these and in a short time showed them to his colleague. He kept the matter quiet with the intention of not discrediting Dr. Freire, but he now regretted his action. On the 17th, the emperor is said to have examined microscopic preparations made by Dr. Vieira de Mello, who claims to have discovered a bacillus in the excretions of patients suffering from acute and chronic malaria, exactly similar to that discovered by Dr. Freire in the excretions of yellow fever patients.

The Cost of the Plymouth Epidemic, according to the Philadelphia *Ledger*, is about as follows: The price in human lives was 107. There is no way to equate that in terms of money. The cost in dollars was nearly sixty thousand in extra expenditure, and about the same sum in loss of wages from enforced idleness among the sick and those who had to wait upon and nurse the sick —in all about one hundred and twenty thousand dollars. Costly experience that for a little town like Plymouth; but the remaining consideration is, Will the people there profit by it?

The Montreal Epidemic.—It is difficult to get the exact truth with regard to the amount of small-pox now in Montreal. For the week ending September 23d, there were 235 cases officially reported. Since then the number of deaths daily from the disease has ranged between twenty and sixty. Estimates as to the present number of cases reach nearly to 4,000. There is some evidence that the epidemic is declining. The Board of Health has not had very much authority—and, perhaps, less inclination—to deal vigorously with the epidemic. It has perhaps been too severely criticised, however, for not doing what it really had no power to do. The prejudice against vaccination among the French Canadians is still very strong, but is yielding a little to necessity, and spiritual and municipal authority. It would be less difficult to overcome traditional prejudice on this subject in the city but for the frightful examples set by those to whom the ignorant look up as guides. A correspondent of *The Times* writes: "Dr. Legault, a physician practising in St. Jean Baptiste, had small-pox in his own family without solating it or reporting it to the authorities, nor did he let that circumstance deter him from going daily rounds among his patients, thus making himself no doubt an agent for spreading contagion." It is stated also that another physician, one of the staff of the French Medical College, a very influential man among his people, is a fanatic on this subject. He not only publicly denounces the method of Jenner, but he teaches non-vaccination to the students at the Victoria College. It is reported that there are several other "cranks" of his kind in the list of the French medical profession, and the result of their open prejudice against scientific repression of the small-pox is that the ignorant masses have become thoroughly imbued with the fatal error. There is another story to the effect that, a number of years ago, owing to the use of impure virus, many people, especially children, became impregnated with scrofula and other noxious disorders. Politics also entered into the question. There are many small demagogues among the French who are always striving to stimulate race prejudices.

Dr. Charles F. Withington was the author of the paper to which reference was made in the editorial of September 26th.

New York College of Veterinary Surgeons.—The opening lecture before the New York College of Veterinary Surgeons was delivered on Saturday evening, October 3d, by Professor James Law, F.R.C.V.S., of Cornell University. The regular session of the college commenced on Monday, October 5th.

The International Medical Congress.—"It will also be noticed that the opinions of certain distinguished foreigners with reference to the committee's office and work were ignored *in toto*, not being accorded even the courtesy of a polite remonstrance. The committee has doubtless done just the work its manipulators set to its hands; but, whether its policy be voted wise or foolish, the denouement will show that the breach between the opposing parties is widened beyond repair, and that the contending voices are dissonant beyond the hope of harmony."—*Louisville Medical News.*

A Doctor and His Spiders.—The daily papers announce the death of Dr. Francis A. Daeumer, one of the oldest physicians in Paterson. He had been for many years one of the remarkable characters in Paterson. His father was a prominent government officer in Bohemia, where the doctor was born nearly seventy-seven years ago. He was liberally educated in Saxony, studying medicine at the Universities of Bonn and Magdeburg. The doctor was licensed in 1840, and served for six years in the Prussian army, as Surgeon of the Eighth Brigade and Seventh Regiment of Lancers. In 1848 he took part in the revolution, was arrested for high treason, and sent to prison, where he spent four years in the dungeons of Rastadt, Ehrenbreitstein, and Julich. While in these prisons, often doomed to solitary confinement, his only companions were the spiders that festooned the walls of his dungeon. He conceived a strange attachment for

these repulsive creatures which he never forgot. The doctor came to America in 1857, and has lived in Paterson ever since, enjoying a moderate practice, and the general esteem of the German-Americans, with whom he almost exclusively associated. He owned a house in Ellison Street, renting out part of it, and occupying two or three rooms himself, and living entirely alone. From his love for spiders he would allow no repairs to be made to the rooms, while house-cleaning was out of the question. The dust of many years was allowed to accumulate undisturbed, and his beloved spiders multiplied apace. If a parcel of drugs or an instrument left overnight had a spider's web on it in the morning, the doctor would patiently sally out and buy articles to replace them rather than disturb the spiders.

THE COST OF THE EPIDEMIC OF SMALL-POX at Montreal is likely to reach $5,000,000.

CONGRESS OF NATURALISTS AND PHYSICIANS.—The fifty-eighth annual meeting of the Congress of Naturalists took place at Strassburg (September 18th to 23d). The number of communications presented to the various medical sections was very large.

AN INTERNATIONAL CONGRESS OF PHYSICIANS ENGAGED IN THE CURE OF MENTAL DISEASES was opened at Antwerp on the 11th ult., under the presidency of M. Victor Desguin, President of the Belgian Society for Mental Diseases. The scope of the Congress comprises: 1. The bases of good International statistics concerning the mentally diseased; and 2, the relation between criminality and mental disease. An International Committee has been charged with the duty of determining the headings for the first of these subjects.

PHOTOGRAPHY IN MEDICAL JURISPRUDENCE.—M. Gosse, at the recent French Congress, read a few notes on the importance of photography in medical jurisprudence. By placing a few drops of glycerine and water on the cornea of a dead man, the living expression is, he declares, reproduced, the exact position at the moment of death being represented in the photograph. This remarkable discovery at least deserves cautious consideration. It is hardly in accordance with current theories on the eye as an optical instrument, yet has been already suggested by other writers.

THE NEW "CANCER CURE."—M. Landowsky, of Paris, has studied the Brazilian plant called by the natives alveloz, and believed by them to cure cancer. M. Landowsky believes this plant to be an euphorbia, discovered by Martin, and described by Muller under the name of *Euphorbia heterodoxa*. A preparation of its juice possesses the combined properties of a caustic and of papaïne. It promptly destroys the affected tissues layer by layer. At Pernambuco, after it has been well painted on the tumor, it is covered with a tobacco-leaf. M. Landowsky, in his communication at the Grenoble Congress, stated that after applying it, he places over it a sublimate of vaseline and borax dressing.

M. PASTEUR.—It is reported that M. Pasteur, who is now in the Jura, will, on his return to Paris, organize a system for protecting animals from rabies. He has arrived at a prophylactic method applicable to man and beast. Before leaving Paris, M. Pasteur applied the process to a boy who had been bitten on both thighs, both legs, and hands. The child is as yet in perfect health.

RUSH MEDICAL COLLEGE, CHICAGO.—Rush College, of Chicago, by a recent action of its faculty, is to have, after the present college year, an additional condition of graduation. This consists of a course of practical instruction in the laboratory of physiology and pathology. The details of the course are not fully arranged, but it will include instruction in the management of the microscope, study of the histology of the simple tissues, and study of the urinary sediment.

A LIBRARY LOST BY A FLAW IN THE WILL.—By his will, made on October 27, 1881, the day before his death, Robert R. McIlvaine, of this city, bequeathed his collection of books and pamphlets to the Mayor of the city of New York, and the Presidents of the New York Academy of Medicine and the College of Physicians and Surgeons, as his trustees, for the purpose of establishing and maintaining an institution to be known as the McIlvaine Library. To maintain it he bequeathed to his Trustees all the residue of his estate—estimated at about $60,000—after the payment of certain legacies. The heirs have brought suit for the purpose of breaking the will, and the Court has decided that the provisions with regard to the library were invalid.

THE CONGRESS OF RUSSIAN PHYSICIANS AND NATURALISTS, which was to have been held this year at Kharkoff, has been postponed until August, 1886.

THE INTERNATIONAL CONGRESS OF PHARMACY.—The sixth meeting of this Congress was held during the first week in September at Brussels. Measures were taken looking to the establishment in every country of a uniform course of study for pharmacological candidates, the graduates to receive a diploma, without which no one would be allowed to practise pharmacy. It was suggested also that the successful candidates should be entitled to the degree of Doctor of Pharmacy. The discussion of the question of an international pharmacopœia was postponed to the next Congress, in 1888.

TREATMENT OF MASTITIS BY REST.—Dr. W. F. Milroy, of Omaha, Neb., writes: "The issue of THE MEDICAL RECORD of August 22d contains a letter from Dr. P. A. Harris, entitled 'The Treatment of Mastitis by Rest and Compression.' That gentleman states that it is his object to 'review certain assertions' made by myself in an article published in THE RECORD of August 8th. In the beginning of his letter he makes an unmistakable insinuation which is very damaging to my personal character. In THE RECORD of September 5th Dr. Paul F. Mundé, very kindly and wholly unsolicited, comes to my aid, and I am released from the uncomfortable position in which Dr. Harris placed me. In order that the conclusion of Dr. Harris might be true, it was necessary that the case which I related in my paper should have been the first in which I used the treatment by rest, etc. In drawing this conclusion Dr. Harris says: 'It will be seen that Dr. Mundé's acceptance of my paper is dated June 11, 1884, and Dr. Milroy first employed his compression and rest under the service of Dr. Mundé, June 23d, of the same year.' The assertion that this was the

first case in which I made use of this plan of treatment, Dr. Harris has made entirely on his own responsibility. I have carefully re-read my paper and I find in it no trace of a clue as to whether the case in question was the first or last one of the thirteen to which I referred. In point of fact it was the eleventh. There are other points in the work of my 'reviewer,' upon which additional light is needed, but in consideration of the spirit in which he writes, I prefer to pursue the matter no further."

COMPLETE LIST OF WITHDRAWALS FROM THE ORGANIZATION OF THE INTERNATIONAL CONGRESS.—Out of the forty-two members of the Original Committee on Organization, there now remain only the following eight: Drs. Austin Flint, H. F. Campbell, R. A. Kinloch, N. S. Davis, Robert Battey, L. A. Sayre, Surgeon-General U. S. A., Surgeon-General U. S. N.

After the meeting of the American Medical Association in New Orleans, it was directed that the original committee of seven be enlarged by adding representatives from each State, Territory, etc., so as to make the total number forty-seven. This, known as the New Committee, met and organized permanently at Chicago. From this committee seven gentlemen have withdrawn: Drs. John S. Billings, John M. Browne, U. S. N.; Geo. J. Engelmann, I. Minis Hays, Christopher Johnson, *N. Senn, *T. F. Wood. From the rest of the general organization the following have withdrawn: Drs. A. Stillé, *H. H. Skillman, *John L. Atlee, *Oliver Wendell Holmes, Vice-Presidents; John H. Packard, Secretary-General.

The following is a list of the gentlemen who have withdrawn from the organization, in Sections, of the Congress as first planned at Chicago. The names marked thus * are of gentlemen appointed to fill vacancies, but who have declined the honor.

Section on Medical Education, Legislation, and Registration: Drs. S. E. Chaillé, President; Wm. Pepper, L. McL. Tiffany, Professor D. C. Gilman.

Section on Anatomy: Drs. Joseph Leidy, President; W. W. Keen, *G. E. De Schweinitz, Secretaries; Harrison Allen, Frank Baker, Thomas Dwight, F. L. Parker, C. T. Parks, T. L. Sabine, R. W. Shufeldt.

Physiology: Drs. John C. Dalton, President; H. P. Bowditch, J. F. Hibberd, M. Michel, H. G. Beyer, Wm. Lee, Henry Sewell, *J. H. Wythe, Vice-Presidents; John J. Mason, Council.

Pathology: Drs. F. Delafield, President; Wm. Pepper, Vice-President; Wm. H. Welch, Secretary; C. Fenger, R. H. Fitz, G. M. Sternberg, W. F. Whitney, *M. Longstreth.

Medicine: Drs. J. M. Da Costa, President; J. B. McCann, R. McSherry, *S. Weir Mitchell, Vice Presidents; Wm. Ogler, Secretary; S. C. Chew, T. F. Rochester, W. H. Geddings, W. W. Johnston, F. Minot, Beverley Robinson, J. T. Whittaker, *C. F. Folsom, *R. Bartholow, *F. T. Miles, *S. G. Webber.

Surgery: Drs. David W. Yandell, President; D. Hays Agnew, S. W. Gross, R. A. Kinloch, Vice-Presidents; John Ashhurst, Jr., D. W. Cheever, P. S. Connor, F. H. Gerrish, C. Johnston, T. M. Markoe, A. P. Smith, T. A. McGraw, J. R. Weist.

Gynecology: Drs. *Wm. T. Howard, *J. C. Reeve, *Albert H. Smith, *T. A. Reamy, H. P. C. Wilson, Vice-Presidents; Jas. R. Chadwick, Secretary; *Robt. P. Harris, *A. F. A. King, Theophilus Parvin, *E. S. Dunster, W. H. Baker, Wm. Goodell, A. R. Jackson, J. Taber Johnson, E. Van de Warker.

Ophthalmology: Drs. *E. Williams, President; H. D. Noyes, Wm. Thompson, Vice-Presidents; Swan M. Burnett, Secretary; H. Derby, E. G. Loring, W. W. Seely, Samuel Theobald, O. F. Wadsworth, H. F. Williams, *J. J. Chisolm, *B. E. Freyer.

Otology: Drs. Clarence J. Blake, President; H. N. Spencer, Vice-President; S. O. Richey, Secretary; J. O. Greene, G. Strawbridge, C. H. Burnett, E. H. Hazen

Dermatology and Syphilis: Drs. W. A Hardaway, President; L. A. Duhring, J. N. Hyde, I. C. White, Vice-Presidents; J. E. Atkinson, E. O. Wigglesworth, H. C. Yarrow, L. N. Denslow.

Laryngology (combined with Otology): Drs. John N. Mackenzie, President; F. I. Knight, Vice-President; D. Bryson Delavan, Secretary; E. C. Morgan, E. L. Shurley, *R. P. Lincoln.

Public and International Hygiene: Drs. Hosmer A. Johnson, President; A. L. Carroll, Vice-President; G. P. Conn, William H. Ford, J. H. Kidder, J. R. Smith, H. P. Wolcott.

Collective Investigation, etc.: Drs. E. M. Snow, Vice-President; Nathan Allen, James Tyson, *E. P. Hurd.

Military and Naval Surgery and Medicine: Drs. D. L. Huntington, President; Hunter McGuire, Vice-President; S. P. Moore, D. Bloodgood, J. H. Brinton, C. H. Martin, J. R. Tryon, A. A. Woodhull.

Practical and Experimental Therapeutics: Drs. Horatio C. Wood, President; Robert T. Edes, Vice-President; E. T. Reichert, Robert Meade Smith, Secretaries; R. Amory, H. M. Lyman, S. Nickols, D. Webster Prentiss, C. H. White, T. F. Wood, *G. M. Garland, *J. M. Flint.

Diseases of Children: Drs. Samuel C. Busey, President; F. Forcheimer, J. M. Keating, William Lee.

This makes a total of one hundred and forty-three vacancies made by the withdrawals.

In THE MEDICAL RECORD of July 11th, we gave a list of twenty-seven leading physicians of this city who were forced out of the organization by the introduction of an ethical issue. This makes a total of over one hundred and sixty.

THE FLORIDA MEDICAL ASSOCIATION is to be congratulated upon displaying the good sense and self-denial illustrated in the following resolution, which was adopted at the last annual meeting: "*Resolved*, That it is the sense of the Florida Medical Association that it does not consist with the promotion of medical education and the best interests of the profession that any medical college should be instituted or encouraged in Florida at this time, and that the members of this Association will use their influence toward directing students of medicine to some of the many colleges of established reputation and reliability beyond the limits of this State."

DEATH OF PROFESSOR ROBIN.—A cablegram from Paris announces the death of Charles Philippe Robin, a well-known physician and scientist, and member of the French Senate. He was sixty-four years of age.

EVOLUTION AND OBSTETRICS.—Dr. H. G. Anderson, of La Moure, Dakota, reports that out of eighteen births in his practice this summer seventeen have been girls. The doctor, says the St. Paul *Globe*, is a scientist and insists that it is not an accident, but the intelligent provision of nature to satisfy local demand. That is a very new region, in which the male settlers greatly predominate. Such disparity, it is alleged, is never found in the older towns, where the sexes are nearly equal. The La Moure instance is not an isolated one.

THE RESULTS OF THE SANITARY INSPECTION OF FOOD in this city during the past three months are given as follows: During that time there were 1,169 milk inspections made, 1,356 specimens of milk examined, 617 quarts of impure milk were destroyed, and 22 persons were arrested for selling adulterated milk. The fruit, fish, and meat inspectors inspected 353 vessels, 2,402 stores, 1,895 licensed vendors' wagons, 168 markets, and 2,399 stands, and seized and condemned 37,905 pounds of canned goods, 109,144 pounds of meat, 43,981 pounds of fish, 7,160 pounds of cheese, 472 barrels, 197 crates, 387 bushels, and 187 baskets of apples, 1,740 pineapples, 9,000 bananas, 2,651 cocoanuts, 311 egg-plants, 20 boxes of lemons, 408 barrels of musk-melons, 13,706 water-melons, 5 crates of oranges, 1,000 barrels of pears, 900 baskets of peaches, 30 bushels of plums, 23 barrels of potatoes, 100 crates of tomatoes, 1 barrel of turnips, 21 tons of miscellaneous fruits and vegetables, 4 tubs of butter, 5 boxes of eggs, and 2 barrels of pickles. The total number of fruit inspections was 7,313; 1,289 violations of the sanitary code were discovered, and 483 inspections of offensive trades were made. The entire number of inspections of all kinds was 15,112. Dr. Cyrus Edson is entitled to much credit for his energetic and successful work.

THE AMERICAN PUBLIC HEALTH ASSOCIATION will hold its thirteenth annual meeting in Washington, D. C., beginning December 8th. It is rare that a national organization so soon achieves the membership and strength of the Association in question. There is every prospect of a large and useful meeting. Dr. Smith Townsend is chairman of the Committee on Arrrangements. The headquarters of the Association will be at Willard's Hotel.

THE RESULTS OF CREATING "LEGAL DOCTORS" in Indiana are given in the *Indiana Medical Journal*. In Marion County 275 out of the 470 physicians have registered. Of those registered, 195 have diplomas from regular medical colleges, 78 are graduates of irregular institutions or take advantage of the ten or three years' clause. The law has shown up the educational history of the quacks; it has, on the other hand, put these quacks on a legal footing.

LONGEVITY OF GERMAN PROFESSORS.—It is said that there are at present at the various German universities no fewer than 157 professors between the ages of seventy and ninety. Of these 122 deliver their lectures as usual. The oldest is the veteran Von Ranke, the historian, who is now in his ninetieth year, but is not considered fully equal in vigor, memory, and other faculties to Professor Elvenich, who is thirty-nine days his junior.

Obituary.

DR. JOHN LIGHT ATLEE,

LANCASTER, PA.

THE death of Dr. John Light Atlee, at the venerable age of eighty-six, removes one of America's most distinguished surgeons, and one who assisted to create a new epoch in surgery.

Dr. Atlee was born in Lancaster on November 2, 1799, and was the son of Colonel William Pitt Atlee, a Revolutionary officer. He was educated in Lancaster and Philadelphia, studied medicine under Dr. Samuel Humes; and graduated from the University of Pennsylvania in Philadelphia in 1820. After graduating he returned to Lancaster and began the practice of medicine. He soon became very successful in surgical operations, and in this branch of his profession his reputation was very high. Dr. Atlee's operation for double ovariotomy in 1843 was the first in the history of medicine, and the patient is still living in Lancaster in good health. He was one of the founders of the Lancaster City and County Medical Society and twice served as its President. In 1848 he assisted in organizing the Pennsylvania State Medical Society, and became its President in 1857. He was also one of the organizers of the American Medical Association in Philadelphia in 1857, was elected Vice-President in 1865, and President in 1882. He was Professor of Anatomy and Physiology in Franklin and Marshall College for many years; was School Director for forty years; was President of the Board of Trustees of the Pennsylvania State Lunatic Asylum at Harrisburg; was Associate Member of the College of Physicians of Philadelphia; was elected Honorary Fellow of the American Gynecological Society in 1877, and was trustee of numerous public institutions. He was a contributor to many medicial periodicals.

Reviews and Notices.

THE USE OF THE MICROSCOPE IN CLINICAL AND PATHOLOGICAL EXAMINATIONS. By DR. CARL FRIEDLANDER; translated by HENRY C. COE, M.D. 8vo., pp. 195. New York: D. Appleton & Co. 1885.

MUCH good has been done in placing this little work in the hands of the profession. The technique of preparing, cutting, and staining specimens is given at some length; also rules for the examination of the various bodily fluids in both health and disease. The use of the microscope with high powers, immersion lenses, and other accessories, is explained very clearly. It is a very readable volume, even for those not engaged in actual laboratory work. A chromo-lithograph shows the various forms of disease-germs which have been definitely isolated.

REPORTS OF STATE BOARDS OF HEALTH: Of New Hampshire for the year ending April 30, 1885; of Tennessee, October, 1880, to December, 1884.

BOTH of these volumes are published in an attractive form, and though primarily of interest to physicians residing in the States named, they yet contain articles relating to epidemics, etc., that cannot fail to be of interest to those interested in our national medical history.

MIND-READING AND BEYOND. By WILLIAM A. HOVEY. Boston: Lea & Shepard. New York: Charles T. Dillingham. 1885. Pp. 201.

MR. HOVEY presents to us in a succinct form the work of the Society of Psychical Research (London), regarding the subjects of mind-reading, thought-transference, etc. Mr. Hovey and his school are well intentioned, but are, we fear, in pursuit of a will-o'-wisp. However, those who like such sport will be interested in his book.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, October 1, 1885.

A. JACOBI, M.D., PRESIDENT, IN THE CHAIR.

THE Library Committee, Dr. John C. Peters, Secretary, reported that since the last meeting there had been donated to the library seven hundred and one bound volumes.

The Statistical Secretary, Dr. Francis V. White, announced the death of William C. Hunter, M.D., and the President appointed Dr. E. H. Janes memorialist.

THE PRESIDENT then delivered an address, which appeared in THE RECORD for October 3d.

OBSCURE CASES OF WEAK HEART.

DR. R. VAN SANTVOORD read a paper on the above subject, which will be published in THE RECORD.

DR. J. C. PETERS referred to a case of weak heart occurring in a man, sixty years of age, of regular habits, and in apparent health, and brought on, probably, by the error in diet, consisting of the use of prepared foods and condensed milk. He was a bachelor. The result was indigestion and deficient supply of nutrition. When he first saw the man, there was evidence of slight congestion of both lungs, exceedingly weak pulse and action of the heart, dyspnœa, albumen in the urine, evidently of recent occurrence, and for ten or twelve days he was in a desperate condition.

With reference to remedies for feeble cardiac action, Dr. Peters had found nux vomica to be more reliable than digitalis. He had seen several cases of death with weak heart in pneumonia, and formerly thought the fatal termination was due to the formation of blood-clot in the right ventricle, but he had come to regard overstrain of the heart as the real cause of death.

DR. L. WEBER spoke of weak heart, with or without organic disease, where there may be some dilatation and sometimes more or less fatty degeneration. In these rather chronic cases, as stated by the author of the paper, he had not seen any good effect from the use of caffeine (hydrobromate). He had, however, seen the usual results from the use of digitalis—infusion of the English leaves or Squibb's fluid extract.

In the acute cases, such as met with after typhoid fever, scarlet fever, etc., he had given from two to six grains of hydrobromate of caffeine, three times daily, in addition to the usual tonics, and he had thought that the patients did much better than with the use of tonics alone.

DR. E. DARWIN HUDSON said that the proper recognition of the nervous connections and conditions of normal cardiac action, associated with a proper knowledge of what might exert a toxic influence on the nervous centres, gave the physician landmarks from which to start in the differential diagnosis of cardiac diseases and conditions. The careful physician first eliminates organic diseases, and then all the disturbing influences, such as those which come from disorders of the kidneys, the liver, the stomach, etc. Failing in all these directions to detect any cause, he suspected the existence of some obscure organic change not readily recognizable.

DR. J. P. GARRISH mentioned a remedy used by the late Dr. Valentine Mott in cases of feeble cardiac action; that is, tincture of digitalis and tincture of stramonium, equal parts, administered in ten-drop doses three times a day.

DR. ANDREW H. SMITH referred to the double function of digitalis: *first*, to affect cardiac action, and, *second* to promote cardiac nutrition. Small doses are administered with the hope of improving the nutrition of the muscular structure.

DR. J. H. FRUITNIGHT referred to cases in which he had used digitalis, convallaria, etc., without benefit, and in which the use of the tincture of the night-blooming cereus, in doses of from three to ten minums, had served an excellent purpose.

DR. VAN SANTVOORD regarded Dr. Peters' case as instructive and one to which he had referred in a general way, namely, the development of general cardiac failure, but not manifesting itself until some special strain is placed on the organ. In the case mentioned, there was a condition of the lungs which gave rise to strain on the right side of the heart, but probably not sufficient to be serious if the heart had not already been affected.

With Dr. Hudson he agreed that all these cases could be analyzed by careful study and exclusion; but in two of the cases which he had reported the patients were examined by exceedingly competent men, who had said that the heart was entirely healthy, and by one who examined again after the sphygmographic tracings had been taken, and still said that the organ was not diseased.

AN OLD CLINICAL THERMOMETER.

THE PRESIDENT presented a clinical thermometer, received through Dr. George F. Shrady, from Dr. Samuel Francis, of Newport, R. I., it having been used by his father, Dr. John W. Francis, one of the founders of the New York Academy of Medicine. It seemed quite probable that the instrument was made as early as 1830.

On motion by Dr. Agnew, the gift was accepted, with the thanks of the Academy to the donor.

The PRESIDENT also presented a beautiful portrait of

THE LATE CHARLES M. ALLIN,

donated by the widow of the deceased.

On motion by Dr. E. Eliot, it was accepted, with the thanks of the Academy.

The Academy then adjourned.

THE SURGICAL SOCIETY OF PARIS.

Stated Meeting, July 22, 1885.

M. HORTELOUP, PRESIDENT, IN THE CHAIR.

(Special Report for THE MEDICAL RECORD.)

M. SEGOND read a short communication upon the

TREATMENT OF ABSCESSES OF THE PROSTATE.

He maintained that the incision of abscesses of this gland through the rectum was attended with many disadvantages. It was, in the first place, usually insufficient to permit of thorough drainage and evacuation of the pus; there was the danger of hemorrhage; if an opening into the urethra should also occur there would result an urethro-rectal fistula, a very difficult matter to cure; and finally, in this mode of operating, it was impossible to obtain antisepsis. All these difficulties, the writer maintained, were obviated by opening the abscess through a perineal section.

M. RECLUS agreed with the author of the paper in his preference for the external operation.

M. POZZI related a case of

ENCYSTED CALCULUS

of the bladder. The stone was carried for a long time without discomfort, but becoming dislodged, gave rise very suddenly to acute symptoms. The speaker exhibited the calculus to the members of the Society.

M. LUCAS-CHAMPIONNIÈRE related a case of

HYDATID CYST OF THE ANTERIOR BORDER OF THE LIVER.

The patient was a young woman, aged twenty-two, who presented a tumor of rapid growth situated in the right side. It was apparently a tumor of the kidney, but was accompanied by no urinary troubles, and was painless. An incision was made in the median line of the abdomen, when the tumor was found to be attached by a pedicle, about two inches in thickness, to the anterior border of the liver; it had also formed adhesions to the

omentum and to a fold of intestine. The kidney was small but healthy, and pushed back behind the liver. The tumor was seen to be a hydatid cyst with very thick walls, in several parts of which were small points of suppuration. It was removed after a somewhat laborious dissection.

The same speaker also reported a case of

TOTAL EXTIRPATION OF THE RIGHT KIDNEY.

The patient was a woman, aged forty, who was suffering from severe pain and vomiting, and presented a large tumor in the right side. This had grown very rapidly, and, when punctured, gave exit to about twenty-four ounces of pus. An exploratory incision showed that the kidney was the seat of the lesion. Pus now began to be passed in the urine. A few days later the diseased organ was removed through an incision, made from the false ribs obliquely toward the iliac fossa, avoiding the peritoneum. The operation was tedious and difficult, but was followed by excellent results. The wound healed by first intention, and the patient was able to get up on the ninth day. The kidney was of an enormous size, with greatly thinned cortex, but with a thickened capsule.

M. GILLETTE then read a paper on

TUMORS OF THE KIDNEY IN THE MALE.

These were not common, the speaker said, yet through the labors of MM. Horteloup and Poirier, who had chosen this as the subject of their theses, we were now in possession of quite a number of facts of this nature. The author exhibited the cast of a fibrous carcinoma of the kidney, which he had recently removed from a man. The tumor had existed for six years, but the patient would not have thought of having it removed, so little annoyance did it give him, were it not for an oozing of blood and serum which took place from it. Fibrous carcinoma, the author stated, was one of the most common varieties of renal tumor in the male subject. The disease was apt to return, indeed, in man as it was in woman, but it was of a less malignant nature. The characters which distinguished renal tumors in man from those in women were less tenderness, less radiation of the pain, and less tendency to glandular involvement. But, although the symptoms were often apparently of such little moment, the tumors should be removed as early as possible, for they were undeniably malignant.

M. GUERMONPREZ related a case of

TUMOR OF THE ANTITRAGUS

which he had removed from a patient not long before.

M. DUBAR sent a communication concerning a

CONGENITAL CYST OF THE NECK.

The patient was a little girl, nine years of age, who had had a small tumor, the size of a hazel-nut, removed from the neck by means of an injection of chloride of zinc. Six months later the tumor reappeared and was extirpated, and three months afterward it again appeared and was again removed by the knife. This time the cure seemed to be permanent. Microscopical examination showed that the tumor was formed of a sac-wall covered with epithelium, from the under surface of which epithelial prolongations passed down into the subjacent layers of the cutis.

M. RECLUS said that he had had a similar case, in which, however, a fourth relapse had occurred.

M. ANGER thought that the insuccess of cauterizations with chloride of zinc was due to the presence of a membrane lining the sac, and similar to the mucous membrane.

M. TILLAUX said that it was often very difficult to cure these cysts, and attempts at cure were not infrequently followed by the formation of fistulous tracts.

M. POZZI said that these fistulous tracts should be dissected out with great care, and he thought the operation might be facilitated by the injection of some coagulable substance into the sinuses.

M. MONOD thought that the introduction of a fine sound would make the operation less difficult.

The Society then adjourned.

ACADEMY OF MEDICINE OF PARIS.

Stated Meeting, August 18, 1885.

M. BERGERON, PRESIDENT, IN THE CHAIR.

(Special Report for THE MEDICAL RECORD.)

M. LE ROY DE MÉRICOURT read a letter which Dr. Solari, of Marseilles, had written to him in regard to the

CHOLERA EPIDEMICS OF 1884 AND 1885.

The writer said that gastro-intestinal troubles had not existed in any notable degree in Marseilles and Toulon prior to the arrival of the ship Sarthe in the latter place, in June, 1884, but since that time they had been prevalent, even during the winter months, and had increased in proportion as the weather became warmer in the spring. The cholera had been imported from the Tonquin delta, where it was endemic, as it was in all the deltas of Southern Asia. It was true that the sanitary condition of these two cities was bad, but it had been so for many years, yet cholera was not known there until it was imported from the East. It could not originate there, but found a ready field for its development upon its arrival. Now that there was to be ready communication between France and Tonquin, there was no doubt that cholera would be a frequent visitor unless the authorities should institute efficacious sanitary measures.

M. BROUARDEL maintained that Dr. Solari's statements were incorrect in nearly every particular. He denied that the disease had been imported by the transport Sarthe and said that it was not endemic in the Tonquin delta. The municipal authorities of Marseilles were not to blame for the insalubrity of the city, for they had done all they could, but the law was defective in not giving sufficient powers to the health commissioners.

M. FÉRÉOL related a case of

CHROMIDROSIS,

which had been seen in consultation with Dr. Sabourin. The patient was a young woman, about twenty years of age, who had had several violent hysterical attacks. She had convulsions and neuralgia, and almost incessant vomiting. One of the ovaries was tender on pressure. A cure was obtained in the course of time by the application of ice over the ovary and the internal administration of ice and brandy. About two months later, while the patient was in M. Féréol's office, and sitting in a strong light, he noticed on her lower eyelids a bluish tint which gradually became more pronounced. On being spoken to about it she said that she had noticed it for the past two months, and that it was a great annoyance to her. Taking her handkerchief she rubbed the skin briskly for a few seconds, transferring the color from her face to the linen. The patient remained about twenty minutes in the office talking about her trouble, and, as she left, Dr. Féréol noticed that the blue tint was again becoming visible. There was no perspiration, nor could any granules be seen, even with a magnifying-glass, but it seemed to be a uniform staining of the skin. The same phenomenon was present on the chest in the intermammary groove and in the axillæ.

M. JULES GUÉRIN then read a paper upon

SUBCUTANEOUS SYNDESMOTOMY IN THE TREATMENT OF CLUB-FOOT.

He said that in a case of talipes in an infant or an adolescent which had resisted tenotomy, success might be attained by the division of certain of the ligaments.

In over a thousand cases of club-foot he had not met with one which was not amenable to treatment by tenotomy and syndesmotomy, combined with manipulation and the adjustment of suitable mechanical apparatus. For the correction of equino-varus he practised division of the internal lateral ligament of the tibio-tarsal articulation and of the internal calcaneo-scaphoid ligament; and in talipes varus the inferior calcaneo-cuboid ligament. There was no danger if the subcutaneous operation was performed, and if the cutaneous wound was made as far as possible from the point of division of the ligament. The subsequent manipulations, without which no cure could be effected, were not to be attempted until cicatrization of the external wound had taken place. The speaker exhibited some plaster casts showing the good results obtained by this method.

M. Bouley said that he had had an opportunity of witnessing the success of M. Guérin's operation. A boy, who before the operation could scarcely walk, and who stepped upon the dorsum of the foot, was able, a few weeks after syndesmotomy was performed, to walk naturally and easily with the sole of the foot resting squarely upon the ground.

M. Gibier then read a paper entitled

EXPERIMENTAL RESEARCHES ON CHOLERA,

which embodied an account of the labors undertaken by himself and Dr. Van Ermengen, of Brussels.

M. De Villiers communicated the results of observations upon the

PRESENT EPIDEMIC OF CHOLERA

in the South of France, which he had made during a recent tour of the infected districts. This present epidemic, unlike that of last year, had been preceded for some time —the entire winter indeed—by numerous gastro-intestinal disorders.

M. Léon Lallemand, member of the Society of Political Economy, read a paper entitled

A CHAPTER IN THE HISTORY OF INFANT ABANDONMENT.

The paper dealt principally with the statistics of mortality of the foundlings in the *maison de la couche*, at Paris, during the seventeenth and eighteenth centuries.

The Academy then adjourned.

THE BERLIN SOCIETY OF INTERNAL MEDICINE.

Stated Meeting, June 15, 1885.

Herr Leyden, President, in the Chair.

(Special Report for The Medical Record.)

The President announced that the Imperial Normal-Standard Commission had been asked to undertake the work of testing thermometers, and at his suggestion it was voted to send a delegate from the Society to attend the next meeting, at which this subject would be considered.

Herr Becher presented a case of

ECHINOCOCCUS OF THE LIVER.

The patient, a boy, nine years old, had always been healthy, with the exception of a severe attack of pleurisy through which he passed three years ago. Five weeks ago a tumor was noticed over the liver in the right mamillary line. It was about the size of half a Borsdorfer apple, with tense walls through which fluctuation was distinctly perceptible, and painless on pressure. The boy was in the habit of playing with dogs, and allowed them to lick his face and hands, and it was probable that the tape-worm eggs were transported by the dogs' tongues to the boy's hand, and thence gained admittance into the stomach. The principal interest in the case centred upon the question of treatment. Formerly surgeons were loath to operate in such cases, and treated them more on an expectant plan. In many instances a spontaneous cure took place, but not infrequently also death resulted from peritonitis or rupture of the cysts. The present tumor had increased one-quarter in size in the past five weeks, and it therefore seemed inadvisable to delay. The speaker had determined to operate, and he would inform the Society of the result at some subsequent meeting.

Herr G. Behrend asked whether the urticaria wheals, which were visible here and there on the boy's body, were there before, and whether they had been more numerous than they were now. He said that urticaria was not uncommonly seen with hydatids, especially after rupture of the sac and absorption of its contents.

Herr Becher replied that he thought the wheals were the effect of the cold water compresses which the patient had worn.

Herr Litten bore witness to the truth of the fact alleged by Herr Behrend. He had himself observed a similar occurrence in Frerich's clinic.

Herr Köbner exhibited a case of

RHINO-PHARYNGEAL SCLEROMA.

The patient was a strongly-built man, forty-six years of age, a Polish wheelwright. His nose was enlarged, of a deep-red color, hard to the touch, and the nostrils were stopped up with a dark-red, lumpy, scabby looking mass. When this was removed the nasal cavities were seen to be completely filled, to such an extent that even air could not pass through, with an immense number of small growths attached to the septum, alæ, and floor. These growths were comparatively soft, and when cut were painful and bled freely. The velum of the palate was covered with erosions, and some deep, but small ulcers, and in some parts, especially on the right side, were little tumors of an almost ivory consistence. The posterior portion of the velum was contracted by cicatricial tissue, and attached to the posterior wall of the pharynx. Where the velum passed to the anterior palatine arches there was a shining, yellowish, white growth. The hard palate was normal, as were also the gums and the tongue. The larynx and trachea were not involved, and the patient was perfectly well in every other respect, and gave no evidence of syphilis. He said that when twenty years old he had had gonorrhœa and epididymitis, and later a chancre which had healed rapidly without any subsequent symptoms of constitutional trouble. He had always been subject, as a boy, to nose-bleed. He first noticed that something was wrong ten years ago, when he began to be troubled with the accumulation of large quantities of dried mucus in the left nostril. Six months later there was a profuse secretion of mucus, and he noticed that his voice had a nasal twang. At the same time he felt a burning in the palate when drinking spirituous liquors or smoking. Two years after this the right nostril was affected in the same way. The patient had taken iodide of potassium, and had had inunctions of mercury, but with no result.

Herr Jarowitz related a case of

TUMOR OF THE CEREBRUM.

The growth was the size of a hen's egg, situated in the right frontal convolution. The first symptoms had appeared suddenly five weeks before death, and were those of meningitis, dizziness, intense headache and vomiting. The paralytic symptoms were an indication for the diagnosis, as regards location of the tumor, which was confirmed at the autopsy. The patient died suddenly in coma.

Herr Lassar exhibited a case of

ERYTHEMA EXUDATIVUM.

The patient was a man, sixty-five years of age, who had previously been in good health. His body was covered with bright red, in some portions livid spots, with more or less elevated base, which showed a slight tendency to symmetry on the two sides of the body. In many parts there were sub-epidermal exudations of fluid,

sometimes going on to the formation of large blisters. The case was one of exudative erythema, or

EXUDATIVE PHLYCTENOID HERPES.

The speaker had now five similar cases under treatment, not all, however, as severe as this. This patient had no fever, but in one of the cases there was a considerable elevation of temperature. The origin of the inflammation was to be referred to irritation from a plaster containing turpentine which the patient had applied for the relief of a severe colic.

HERR A. FRÄNKEL then read an exhaustive paper on

DUODENAL ANCHYLOSTOMA.

The disease, which had been known for a long time, was thought, until very recently, to be confined to the tropical regions of Asia, Africa, and America, the only exception being its existence in Italy. Griesinger was the first to recognize the parasitic nature of the affection, having discovered the anchylostoma during his study of the disease in Egypt. Professor Perroncito found the same parasite to be the cause of the anæmia from which the laborers in the St. Gotthard Tunnel suffered, and also of miners' anæmia. There is still another affection,

BRICK-MAKERS' ANÆMIA,

which has long been recognized, and which was supposed to be a form of essential anæmia. This has now been shown to be due to the presence of the peculiar parasite, and the speaker thought it not improbable that the same cause might be concerned in the production of pernicious anæmia.

The parasite is a round worm, varying in length from six to eighteen millimetres (one-fourth to three-fourths of an inch), the females being the longer. The mouth is characteristic; it is provided with strong teeth, by means of which the parasite attaches itself to the wall of the intestine and opens a blood-vessel. The eggs of the worm are found in great numbers in the intestine and pass off with the fæces. They are not further developed in the intestine; but outside, if kept in a hatching-oven at a temperature of 76° to 82° F., the larva is hatched out in forty-eight hours. The process is again arrested and the larva develops into the anchylostoma only when in the body of its host. The larvæ are usually taken in with the drinking-water.

This disease is manifested, clinically, by severe gastric disturbances and by anæmia. The latter is caused partly by the direct loss of blood and partly by the interference with normal digestion. The patients become gradually paler and suffer from colic, vomiting, and diarrhœa. Examination of the blood shows a decrease in the proportion of red globules to the extent even of one-fifth of their entire number.

THE TREATMENT OF ANCHYLOSTOMA DUODENALE

consists, of course, in the removal of the parasite. The most effective means, though not always a perfectly safe one, is the administration of one-half to one ounce doses of the ethereal extract of male fern. Thymol in powder, in doses of one-half to two and a half drachms per diem, is also effective. A safer drug, which has found favor in Brazil, is doliarina. This is a mixture of the juice of the *ficus doliaria* with iron and aromatic powder. The daily dose is one drachm. After the expulsion of the worms, tonics and a nourishing diet are necessary.

The Society then adjourned.

TEN CENTS' WORTH.—We have rarely seen a more striking illustration of dewy freshness, or of fine appreciation of the value of medical services than is shown in the following letter, forwarded to us by Dr. E. H. Greene, of Atlanta, Ga.: "Dr E. H. Greene Dear Sir Please send me a medicine that will cured my diseas.: send .10ct worth and as soon as possible. my diseas is the "Clap.' send carfully to S. F. F——." Five two-cent stamps were enclosed.

Correspondence.

OUR LONDON LETTER.

(From our Special Correspondent.)

THE SHORTCOMINGS IN LONDON MEDICAL TEACHING—FACILITIES FOR MEDICAL STUDY TO MEDICAL VISITORS—GENERAL AND SPECIAL HOSPITALS.

LONDON, September 22, 1885.

A GREAT deal has been said about the shortcomings of London as a medical centre. I must confess there is a good deal of truth in much of what has been said. Considering the vast size of this metropolis and the enormous amount of clinical material available, London medical teaching is not what it ought to be—not what it might be. This is partly due to the size of London and the indiscriminate way, so to speak, in which its medical institutions are scattered over it. A foreigner visiting London will find no such concentration of clinical material as at Vienna, where in the vast Krankenhaus he will find a conglomeration of almost all the diseases under the sun—at any rate of those under the sun of Austria. I may also add, parenthetically, that he will also not find in London such absolute disregard of patients' feelings and modesty as he will see displayed at Vienna. In London he will have to rush about from hospital to hospital if he wishes to see all there is to see, and see some of the practice of different schools. As elsewhere, he will also find that not every man who holds an important hospital appointment makes the best use of it for teaching purposes. Some cannot teach; others will not. Of those who both can and will, many are too busy with private practice to give much time to clinical teaching. They pay a hurried visit to their wards, and perhaps when they have seen half their patients a glance at the clock shows them that they are due at some private appointment, and, with just a glance at the more important of the remaining patients, off they go. Private practice is much more lucrative than teaching, and when it begins to come apace it is not to be wondered at that it should be set first. Many men, too, who would make excellent teachers in the wards have to drudge for years in the out-patient department before they get charge of beds. They spend their best energies and the best years of their lives in prescribing for chronic bronchitis, ulcerated legs, and so forth. If a man is a good teacher and naturally fond of teaching, ten years among out-patients is likely to dampen his zest a little. Then, again, the rule which requires a physician or surgeon to retire from his hospital appointment after twenty years, although a good rule on the whole, yet sometimes deprives our medical schools of some of their best teachers. Jenner, Walshe, and Hutchinson may be instanced as examples.

Still there is something to be seen in London, and a medical visitor may see a good deal if he uses his time aright. I will give a few hints which may be useful to American medical men visiting London.

First of all, as to the general hospitals, and more particularly those with medical schools attached. In all of these there is regular clinical teaching in medicine, surgery, and the various specialties, though for the latter some of the special hospitals may with advantage be visited. The best way of seeing the working arrangements of a London hospital is to make an early morning call, and for the medical visitor to send in his card to the house-surgeon or house-physician on duty. They will usually be pleased to give him any information in their power, and will probably allow him to accompany them a few times in their morning visit to the wards. He will thus see much more of the hospital than if he only accompanies the physician or surgeon in his rounds. In the surgical wards he will see the dressers at work, and if the house-surgeon is not very busy he will generally find him both able and willing to give him information about

the cases and the various methods of treatment employed. He can then accompany the physicians and surgeons in their rounds. At the London Hospital an American graduate can hold a dressership or clerkship for a few months, if he wishes, on payment of a small fee.

Antiseptic practice may now be seen at all the general hospitals, but a visit should certainly be paid to Sir Joseph Lister's clinic at King's College Hospital.

It is in studying the various specialties that the greatest drawback is felt. Although almost all our general hospitals now have special departments—in many of which there is excellent teaching—yet a specialist visiting London would naturally wish also to visit some of the special hospitals. Then will he find his troubles commence, and he will sigh for the centralization met with in Vienna. If he is interested in more than one specialty—or even if he wish to attend two or more institutions devoted to the same specialty—he will find a good deal of time consumed in getting from one part of London to another. He will often also be disappointed by finding that two clinics which he wishes to attend are both held at the same hour. Still, by a judicious planning out of the day's work it is quite possible to go about and see a good deal, and the expenditure of a few shillings a day in hansom cabs will enable the visitor to get over the ground very quickly. I may remark *en passant* that for short distances a hansom cab is by far the most rapid means of transit, even more so than the Metropolitan Railway, unless the traveller is close to a station of the latter. For eye diseases the practice of the Royal Ophthalmic Hospital in Moorfields (City) should be watched. It is decidedly the largest ophthalmic clinic in London, and systematic instruction is given. Patients are seen early in the morning, so it can be attended without missing the afternoon clinics elsewhere. Those who are located at the West End will find a good deal to see at the Westminster Ophthalmic Hospital (Charing Cross), where the clinic is in the afternoon. The largest clinic in skin diseases is at the Blackfriars Hospital (Stamford Street), though there are several others. Laryngeal diseases may be studied at the Golden Square Hospital (which is the oldest), also at the Central Throat and Ear Hospital (Gray's Inn Road). There is an ear hospital in Soho. There are two orthopædic hospitals at the West End and one in the city. Dental practice can be well seen at the Dental Hospital in Leicester Square. There are several hospitals for women, of which those in Soho Square and at Chelsea are the most worthy of a visit. The gynecologist would do well also to visit Dr. Mathews Duncan's clinic at St. Bartholomew's Hospital, and Dr. Playfair's at King's College Hospital, the latter being near the Law Courts. Antiseptic midwifery may be seen in operation at some lying-in hospitals, viz., Queen Charlotte's (in the Marylebone Road), the British (in Endell Street, Long Acre), and the General (York Road, Lambeth). At either of these he will find the resident medical officer or matron ready to give him any information he may desire. We have, however, in London no institution resembling the Rotunda Hospital in Dublin, where clinical midwifery may be studied fully and systematically. We have also no clinics where venereal diseases are systematically considered, though there is a small Lock Hospital for men in Soho, and a much larger one for women at Westbourne Green (Harrow Road). As the Contagious Diseases Acts are not now in force the syphilographer will not find much of a field for study, even in those towns to which they applied, and to the hospitals of which lock wards are attached. It is perhaps needful to remark that the acts never were in force in London.

The medical visitor who wishes to see something of British practice, and has not much time to spare, will do well not to be too ambitious. By confining his attention mainly to one or two hospitals he will see a great deal more in a short time than by frittering away his time between half-a-dozen. He may, it is true, find time to pay a flying visit to a good many of our medical institutions, but to gain a real insight into British practice he will do well to confine his attention mainly to a few. Which these should be must depend on his tastes and partly on his location in London. If he is not a specialist he will do well not to devote too much time in going the round of the special hospitals, but to content himself with attending the special departments of one of the general hospitals. In many of them he will see good practice and find the physician or surgeon in charge both able and eager to teach. The neurologist, though, should scarcely omit to pay a few visits to the National Hospital for the Paralyzed and Epileptic in Queen Square. The Brompton Hospital for Consumptives, too, is well worthy of being inspected, whether the visitor be interested in chest diseases or not. (So is that at Ventnor, Isle of Wight, where every patient has a separate bedroom.) The Cancer Hospital and the Chelsea Hospital for Women are both near, and might be seen on the same day. No medical visitor to London should fail to visit St. Thomas' Hospital. Architecturally, if for nothing else, it should command attention. I need scarcely say it is also an important centre of clinical study. Guy's, The London (which has the largest number of beds of any hospital in Great Britain), and St. Bartholomew's should all be seen once at least. As specimens of model parochial infirmaries those of St. George's, Hanover Square (at Fulham), and of Marylebone (at Notting Hill) may be visited.

I presume no medical visitor to London would fail to visit the College of Surgeons and inspect its library and museum. Many hours might be spent in the latter. The museums, too, of many of the hospitals are well deserving of attention. Guy's Hospital Museum contains a very valuable and unique collection of wax models.

THE GRAPE AS A FOOD AND MEDICINE.

To the Editor of The Medical Record.

Sir: In view of the fact that the administration of drugs is becoming every day more and more the opprobrium of medicine, and now that the grape season is at hand, I desire, through the medium of your excellent journal, to call the attention of the profession to the physiological and curative virtues of grapes when employed as a medicament.

I may remark, at the outset, that I have, in connection with the subject, figured several times in the somewhat anomalous character of a physician taking his own prescription, and have, moreover, never felt the force of the Gallic facetiousness that objects to taking wine in the form of pills.

The grape cure is a therapeutic means that seems to be very little known, not only in the United States, but among English-speaking people generally. As far as my limited time will allow inquiring into the literature of the subject, the English references appear to be extremely scanty. Nevertheless, the subject has a history and a bibliography of its own, ancient, mediæval, and modern, extending from the time of Dioscorides and Pliny to recent Spanish, Italian, French, and even modern Greek memoirs on ampelotherapeutics. It is, however, to German literature that one must look for the most intelligent and interesting accounts, which are to be found in the numerous monographs published in the last few decades. Some years ago my attention having been directed to the subject through one of the latter sources of information, I shortly afterward had an opportunity to prove some of the results of the grape cure by personal experience. Arriving in Cadiz after a long voyage and the monotonous diet of a sailing ship, and my system being considerably below par, I determined to try for a time a diet consisting almost exclusively of grapes, which at the time were plentiful in the sherry region of Andalusia. The result was rapid re-establishment of all the bodily functions, with a sense of well-being, and a feeling of more

than ordinary strength and agility. Here, however, arose a difficulty in distinguishing the results of the effect of the grapes from the results of the regimen, the other dietetic adjuncts of the cure, and the change of surroundings.

But the advocates of the grape cure having made satisfactory observations on the action of grapes, independently of the dietetic and hygienic adjuncts of the cure, and having studied the grapes chemically as well as clinically, I was prompted, while in San Francisco, to resort to the grape cure for the second time and under circumstances almost analagous to those detailed in the first instance. The result being highly satisfactory, I recommended the cure to several other persons who were much run down from overwork and bad diet, and I soon had the satisfaction to see a rapid gain both in their weight and appetite.

The quantity of grapes that one may eat with impunity is something astonishing. Most persons at the European uval stations consume from three to six kilos. daily. I have, however, greatly exceeded this quantity while sojourning on a California grape ranche. Grapes constitute a perfect nutriment which encloses in remarkable proportions the nitrogenous, albuminoid, and respiratory principles indispensable to a good alimentation; and the grape cure is an essentially alimentary regimen in which the principles of a vegetable nature predominate over those of an animal nature. Doubtless the knowledge of the alimentary properties of grapes derived from the fact that certain migratory birds fatten on them, and that the flesh of young foxes after a grape diet becomes palatable, may have had more to do with the employment of grapes as a medicament than any knowledge deduced from their chemical study. According to the analysis of Henry and Chevallier, a striking anology exists between the juice of grapes and woman's milk. These chemists find in 100 parts as follows:

	Human milk.	Grape juice.
Albuminoid and nitrogenous matters	1.5	1.7
Sugar, gum, etc	11.0	12 to 20.0
Mineral substances	0.4	1.3
Water	87.0	75 to 83.0

It is further consistent with the chemical deductions of the properties of grapes that cures analogous to those obtained by natural mineral waters may be accomplished with great success. In Germany, the grape cure is looked upon as a necessary and indispensable complement to the thermo-mineral treatment, and it is customary to send patients after such treatment to places like Bingen, Durkheim, Vevay, Aigle, and Celles-les-Bains. At certain of these uval stations patients are recommended to drink two or three glasses of the freshly expressed juice; and they are also provided with baths for persons who want to be plunged into the mash of the grapes while it is in a state of fermentation. These baths, much in vogue at some of the stations, are highly recommended against rheumatic pains.

Some of the affections for which the grape cure may be used as a reparative medicinal agent of great value are those arising from troubles in the functions of the organs of digestion, diseases of the liver and spleen, suppression of the hemorrhoidal discharge, menstrual derangement, etc. The cure is especially recommended by its partisans to persons of irregular digestion who have deluded themselves into the habit of taking purgatives. In simple opposition to this, the capital virtue of grapes has been demonstrated in the cure of inveterate diarrhœa — the *rationale* of which is that diarrhœa is rather a symptom of several diseases than a distinct morbid entity. The cure is also advised in catarrhs of the air passages, and to remedy the state of general exhaustion that keeps up all troubles of the respiratory apparatus. Alkaline and sweet grapes are used to relieve the vomiting of acid dyspepsia, or when it is desirable to liquefy the materials of the blood or bile; in hypertrophy of the liver or spleen, grapes containing large quantities of sulphates and phosphates are preferable. Treatment by the more astringent grapes along with general analeptic measures always gives good results when the object is to reconstruct the blood of anæmics, chlorotics, and convalescents. The grape diet is said to augment the urinary secretion and to diminish the formation of acids and salts of the urine, as in gravel and gout. Some German physicians, however, consider its indication as problematical in the uric acid diathesis. The uval cure may likewise be used as an adjunct or as a complementary cure in the treatment of impotency, since grapes taken in large quantities are decidedly aphrodisiacal.

But it is in certain neuroses, especially those in which there is great psychical depression, as hypochondria, melancholia, and hysteria, or in nervous states less cerebral than abdominal, that the virtues of the grape cure are brilliantly demonstrated. Relative to this subject, a confirmatory and most interesting case has occurred in my own practice. In February, 1884, I was consulted by a prominent business man of Washington, of middle age, who had suffered from obstinate insomnia and its train of evil consequences for eleven years, and during that time he had contracted the bromide habit. In addition to treatment by local physicians, he had successively been under the care of eminent neurologists in Philadelphia, New York, London, and Paris, with but indifferent results. His atavistic antecedents were not entirely satisfactory; but his venereal history was fairly good; he had stopped the use of tobacco, and his habits were temperate, though he was not a teetotaler. The patient complained of general languor and debility; of a clawing pain within the head; of inability to concentrate his thoughts, and of loss of will-power. He had, moreover, many of the symptoms peculiar to agoraphobia, the most prominent of which was the fear of an impulse to commit suicide. The patient stated that he had taken the bromides of potassium and sodium in almost incredible doses since 1873. From 1874 to 1876—a period of two years—he took daily one hundred and thirty-five grains, without missing a day. The quantity was gradually decreased in 1878 to eighty grains a day, and to fifty grains in 1883, during a visit to the "Healing Springs" of Virginia. He subsequently took ninety grains daily. The patient was cachectic in appearance; but there were no sensory, motor, or mental symptoms indicative of organic lesion. Examination with the differential calorimeter, however, revealed the existence of a considerable degree of cerebral hyperæmia. Under treatment my patient made but indifferent progress toward improvement, and having nearly exhausted my efforts to break up the bromide habit, I wrote to my friend, Dr. William A. Hammond, who informed me in reply that he had cured several cases of this habit by prescribing a solution of chloride of sodium, the dose of which is gradually increased, the bromide, at the same time, being correspondingly decreased until a few minims is reached, when the patient breaks off the habit on being told that he is taking nothing but table salt. This plan did well for several weeks, but during my summer absence in Europe, the patient accidentally learned from his druggist what he was taking, and immediately discontinued the prescription. On my return in autumn, I at once directed the patient to eat large quantities of grapes, the object of which was explained to him, and within a week I had the extreme satisfaction to see an important and salutary change in the symptoms. The languor and debility had left; the sleep was improved; there was not so much psychical depression, and the craving for the bromides was lessened. The habit is now entirely broken up; the patient sleeps fairly, is rid of melancholia, has regained his virility, to his great delight; and is in every respect improved and reconstructed.

As a matter of course, it is not pretended that positive deductions are to be made from the foregoing hasty out-

lines without the concurrent testimony of other observers and a more profound study of this subject. In view of the effects obtained by the grape cure in Germany, Switzerland, and Italy, it is regretable not to see it also common in America, notably in such regions as California, whose pure air, beautiful climate, and great abundance of excellent grapes, make it best adapted for the experiment of a uval station. With a view to farther comment on the subject, I take the liberty to solicit from those who may be prompted to try the grape cure a communication of the results of their observations. Since it is sufficiently demonstrated that the methodical and rational use of grapes suddenly breaks up all habits of nutrition, rapidly reconstructs the blood, and exercises a salutary action upon the nervous system, the grape-cure would apply to many persons in our large cities, who, in consequence of extreme heat and improperly cooked food, suffer from congested livers and intestinal catarrh, which they miscall malaria. Overworked clerks and newspaper men, who keep late hours and live on boarding-house fare, may derive from the vegetable milk of the luscious but inoffensive grape a rational means to re-establish the physiological conditions of clear thought and correct expression; scrofulous subjects, lately under treatment at the Hot Springs, may complete the cure by means of the grape regimen, and ailing humanity of various grades may be benefited in many instances if they would replace the nasty drugs of the apothecary by the excellent fruit that graces the table and brings to pass so many delights.

IRVING C. ROSSE, M.D.

WASHINGTON, D. C.

"THE DUTY OF THE CONSULTING TO THE ATTENDING PHYSICIAN."

TO THE EDITOR OF THE MEDICAL RECORD.

SIR: After reading the article in THE MEDICAL RECORD of September 26, 1885, bearing the above heading, I thought I would relate a case that occurred in my own practice, if you will kindly allow it.

Soon after graduating I settled at U——, a country village, about two miles from Dr. H——, who had previously had nearly the entire practice at U——. My practice was good from the first, a fact more pleasant to me than to Dr. H——, doubtless.

About six months after my settlement I was called to attend I. T——, a boy of eight or nine years, the only son of an influential merchant of this town, and an acknowledged leader of his "circle." The case was one of bronchitis, quite severe, but with no unfavorable symptoms or complications.

About the fifth day I fancied I noticed a growing dissatisfaction, and I proposed a consultation, which was accepted with such alacrity as to confirm my fancies, They proposed Dr. H——, but I overruled them with the plea of not being acquainted, and they agreed to my sending for Dr. B——, whom I knew to be friendly. He came, saw the patient, agreed with me in diagnosis and treatment, gave a good prognosis, not only to me but to the friends.

I then believed everything to be satisfactory, until two days afterward, when, on returning home from a short trip of less than two hours, I was informed that Dr. H—— had been in to see my patient. On making my evening call the father excused Dr. H——'s call; said the boy grew worse; I was out of town; saw Dr. H—— drive by; called him in; looked at child; refused to say or do anything during my absence; had finally agreed to come and consult with me, if I wished, and as the father wished him to, I consented. He came; the patient was duly examined; we retired to a private room; I gave him all the facts in the case as I understood them; *he perfectly agreed with me in diagnosis, with me gave a good prognosis, and volunteered the statement that he did not see where my treatment could be bettered, unless it should be by the use of the atomizer, which he advised.* I accepted the suggestion and everything seemed amicable.

At my next visit I was startled with the information that as Dr. H—— had agreed to take the case, my services would no longer be required! That they presumed I had done as well as I knew how (!!), but they thought it better to have a doctor of longer experience.

I have since learned that Dr. H—— went back and told them that if the treatment was not changed the boy would die!! and with the anxiety that only parents can feel on contemplating the loss of an only child they made the change.

I shall always feel that I was cruelly treated by this doctor; but, as "Justice" says, "What remedy have we?"

Probably none. Cathell says, "Never expect justice from a rival."

JUSTICE, No. 2.

Army and Navy News.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from September 27, 1885, to October 3, 1885.

MCPARLIN, T. A., Colonel and Surgeon. Directed to transfer his duties and the public funds for which he is accountable, as Assistant Medical Purveyor, to Captain Henry Johnson, Medical Storekeeper, who will, in addition to his present duties, temporarily perform the duties of Assistant Medical Purveyor, New York City. S. O. 223, A. G. O., September 29, 1885.

CALDWELL, D. G., Major and Surgeon. Ordered from Fort Laramie, Wyo., to Fort D. A. Russell, Wyo. S. O. 97, Department of the Platte, September 28, 1885.

BARTHOLF, J. H., Captain and Assistant Surgeon. Ordered from Fort Ringgold, Tex., to Fort McIntosh, Tex., for duty as Post Surgeon. S. O. 125, Department of Texas, September 28, 1885.

BRECHEMIN, LOUIS, Captain and Assistant Surgeon. Ordered from Fort D. A. Russell, Wyo., to Fort Laramie, Wyo. S. O. 97, Department of the Platte, September 28, 1885.

MACAULEY, C. N. B., First Lieutenant and Assistant Surgeon. Relieved from duty at Fort A. Lincoln, Dak. Ter., and ordered for duty at Camp Poplar River, Mont. Ter. S. O. 105, Department of Dakota, September 21, 1885.

KNUDLER, WILLIAM L., First Lieutenant and Assistant Surgeon. When relieved from duty at Camp Poplar River, Mont. Ter., by Assistant Surgeon Macauley, to report to Commanding Officer, Fort Snelling, Minn., for duty. S. O. 105, Department of Dakota, September 21, 1885.

WALES, P. G., First Lieutenant and Assistant Surgeon. Relieved from temporary duty at Boisé Barracks, and ordered for duty at Fort Cœur d'Alene, Idaho. S. O. 160, Department of Colorado, September 21, 1885.

EWING, C. B., First Lieutenant and Assistant Surgeon. Relieved from duty at Fort Stanton, N. M., and ordered for duty at Fort Leavenworth, Kan. S. O. 147, Department of Missouri, September 25, 1885.

Official List of Changes in the Medical Corps of the United States Navy for the week ending October 3, 1885.

JONES, WILLIAM H., Surgeon. To Navy Yard, League Island, Pa., October 15th, as the relief of Medical Inspector M. Bradley.

BRADLEY, MICHAEL, Medical Inspector. Detached from Navy Yard, League Island, Pa., October 15th, and placed on waiting orders.

OWENS, THOMAS, Assistant Surgeon. To Naval Station, New London, Conn., as the relief of Surgeon William A. Corwin.

CORWIN, WILLIAM A., Surgeon. Detached from Naval Station, New London, Conn., and ordered to the U. S. S. Adams, October 31st.

MAGRUDER, A. F., Surgeon. Ordered to the U. S. S. Yantic, without delay, as the relief of Surgeon H. L. Law.

LAW, H. L., Surgeon. Detached from the U. S. S. Yantic, and wait orders.

SIMON, W. J., Surgeon. Detached from the Naval Academy, October 1st, and wait orders.

DRENNAN, M. C., Surgeon. Detached from the Naval Academy, October 1st, and wait orders.

CABELL, ARTHUR G., Passed Assistant Surgeon. To the U. S. S. Adams, October 31st.

Medical Items.

NICKEL-PLATED CORPSES.—An ingenious Frenchman has conceived the thoroughly Parisian idea of preserving bodies by covering them with a metal skin. Burying, he says, has been condemned by experience, cremation is bad, as it destroys all evidence of crime in case murder has been committed, and embalming is expensive. But galvanizing is safe and cheap. The poor can be zinc-plated, well-to-do individuals may acquire a copper coat, and the millionnaires can enjoy the luxury of silver or gold plate. M. Kergovaty, the inventor of this method, says he has already used it successfully eleven times in the case of human beings, and over a hundred times for animals.

INTERNATIONAL CONGRESS OF OTOLOGY.—The Fourth Otological Congress will be held at Brussels in September, 1888. At the Congress of Basle this year, it was announced that Baron Leon de Lenval, of Nice, had offered a prize of three thousand francs to the author of "the best application of microphonic principles in the construction of an easily portable apparatus for improving the hearing." The instruments, complete and ready for use, should be sent to one of the members of the Committee prior to December 31, 1887. In the examination of instruments regard will be had to the excellence of mechanical construction, to the proper observance of the laws of physics, but chiefly to the amelioration of hearing produced by the instrument. The prize will be awarded during the sessions of the Fourth Congress. If no instrument shall be deemed worthy of the prize, the Committee may extend the period of competition up to the date of the opening of the Congress. The members of the jury of award are Dr. E. Hagenbach-Bischoff, President, Missionsstrasse, 20, Basle; Dr. Benni, 16 Bracka, Warsaw; Dr. Burckhardt-Merian, 42 Albanvorstadt, Basle; Dr. Gellé, 20 Avenue de la l'Opéra, Paris; Dr. Adam Politzer, 1 Gonzagagasse, 19, Vienna.

ARTIFICIAL CONCEPTION.—Not long ago a candidate presented to the Faculté de Médecine, of Paris, a thesis upon artificial conception, but after a long and somewhat heated discussion, it was determined to reject the thesis, and to destroy all the printed copies. The grounds given for this decision was, that if the thesis were approved, it might give an opportunity to certain unscrupulous physicians to carry on an unclean business, dangerous to the family and to the State. It is not often that Paris gives evidence of the possession of many scruples in such matters.

OPERATIONS IN MISSION HOSPITAL IN CASHMERE.—Cashmere contains, in addition to its numerous shawl manufactories and papier maché and silver industries, an admirably conducted hospital attached to the mission of the Church Missionary Society, the present medical officers of which are Messrs. Arthur Neve, F.R.C.S.E., and H. D. McCulloch, M.B., C.M. In the report of last year's work, just issued, they say: "Although the number of out-patients is not larger than last year, the wards have been much fuller, and the operations more numerous and more severe. There have been 5,366 out-patients who paid 13,700 visits to the hospital. About 1,000 other patients were treated when itinerating in the valley or on a journey to Ladak; 1,054 operations were performed, of which 339 were major. Only 6 deaths occurred. During 1883, with 800 operations, we had only 1 death. Last year growing experience and the increasing confidence of patients has allowed bolder measures. No cases in which operative relief seemed possible were turned away. Many patients have come over 200 miles for treatment. One man totally blind was brought 250 miles and over snow passes. Both his eyes were successfully operated on. He walked back seeing." In the detailed list of operations there are mentioned 32 successful cases of nerve-stretching for leprosy, 3 excisions of the hip, 344 minor eye operations, and 3 lithotomies. The Maharajah has shown his appreciation of the work done for his subjects by giving substantial help in repairing and adding to the Mission Hospital.

PERSONAL MEDICAL NOMENCLATURE.—A correspondent writes: "From your excellent editorial in last week's RECORD, I have more fully realized what has always seemed a great blunder in medical literature. I refer to the 'Personal Medical Nomenclature.' I trust you will keep up the hammering at this subject." By another correspondent we are reminded that we failed to mention Menière's disease, or labyrinthine vertigo. Sciatica has gone, in times past fortunately, by the name of Cotugno's disease. French writers speak of Parrot's disease, or syphilitic pseudo-paralysis of children. Recently nosology has been in labor again, and we have Gillis de la Tourette's disease, a peculiar form of chorea, described sometimes as latah, and myriachit.

WESTERN MEDICAL COLLEGES AND INSTRUCTION IN MENTAL DISEASE.—Dr. G. F. Harvey, of Parsons, Kans., criticizes a statement of Dr. John W. Wood, of the Trenton Insane Asylum (MEDICAL RECORD, June 20, 1885, p. 694), to the effect that "general paresis" is a disease not mentioned in lectures at medical colleges. Dr. Harvey sends us excellent notes of a lecture on this disease by Dr. Walter Hays, delivered at Rush Medical College, January 19, 1876.

SOME LAY ADVICE TO DOCTORS.—Avoid the society of your patients. Physicians should have no familiars; to be thoroughly respected they must stand aloof from the gaze of society. A prophet has no power in his own country, neither has a physician in his own circle. Without skill it is impossible to become a flourishing physician, but without good manners all the skill of the most eminent physicians will not avail you in a large capital. A good address is everything to a doctor. Never refuse a fee from any person who is able to give one, in order that you may never have occasion to take one from a man who is too poor to well afford one. It matters not how mercenary you may be accounted by the rich, so long as you are merciful to the poor. If you cannot get fees without depriving them of bread, it were better you had never been a doctor.—*Brooklyn Eagle.*

CHLOROFORM AND TAPEWORMS.—Dr. A. T. Boder, of Grand Rapids, Mich., writes that he has successfully treated a patient suffering from tapeworm by administering chloroform, ol. fil. mas, āā ℥ ss.; olei ricini, ℥ jss.

PERFORMING THE OPERATION FOR STRABISMUS ON A HYPNOTIZED PATIENT.—Dr. S. L. McCurdy, of Dennison, O., writes that he has recently performed the operation for strabismus successfully on a mesmerized patient, a young man of eighteen. The patient showed no signs of pain, and was brought out from his mesmeric state at once, when he showed none of the disagreeable after-effects that result from the use of ether.

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Original Articles.

OBSCURE CASES OF WEAK HEART.[1]

BY R. VAN SANTVOORD, M.D.,

NEW YORK.

WEAKNESS of the cardiac muscle, occurring independently of valvular lesion, is recognized as an important pathological factor in a large number of morbid conditions. It is one of the chief sources of danger in most acute febrile diseases, and it remains as a residual disorder after many of them, particularly after typhoid fever. It occurs as a result of long-standing anæmia, and of various toxic conditions, among which alcoholism is prominent. Failing cardiac compensation is frequently the cause of death in chronic renal disease. The right ventricle is often affected in pulmonary diseases involving obstruction to the lesser circulation. Degeneration may result from inflammation of the cardiac muscle occurring in the course of various general diseases, or as the secondary result of lesions of the coronary vessels. The heart may give out as the result of repeated strain. The heart-muscle itself after death may be in a state of granular, fatty, fibroid, or waxy degeneration, as the result of one or other of these conditions; or its histological structure may be apparently normal, although the ante-mortem history and the dilated cavities of the organ point to cardiac failure as the cause of death.

It is not my intention to attempt the impossible task of covering this wide field in a single paper. Many of these cardiac conditions are among the best recognized features of the general morbid states with which they are associated. In others, again, the connection between symptoms and the underlying cardiac lesion is obscure and easily overlooked, from the absence of striking physical signs of cardiac disease. It is my purpose to confine my attention to this latter class of cases, considered from a clinical point of view. As a positive diagnosis can frequently be made *only* after careful study of the individual case and balancing of the various symptoms and physical signs observed, it has seemed to me that my not very easily circumscribed subject could be most suggestively presented by the relation in brief of a few cases which have come under my personal observation, with comments upon the special points of interest which they present.

I.—My first case was that of a fresh-looking, slightly corpulent man, aged forty-two, who was apparently the picture of robust health. He was a dry-goods salesman by occupation, and beyond occasional drinking with a customer, and too rapid eating, his habits were in every way good. His indulgence in alcohol was never excessive. He complained of sleeplessness. It was difficult to rouse him in the morning after a full night's rest. He would frequently fall asleep at any time during the day when not actively occupied. He suffered from frequent headache, which glasses prescribed by an oculist to correct hypermetropia relieved but little. He was forgetful and not able to attend to his business as well as formerly. On being questioned he recalled that he was somewhat short of breath on going up-stairs, but had not been much annoyed by this symptom. He suffered also at times from slight disturbances of digestion. His urine was normal. The only evidence of organic derangement discovered was that the heart-sounds, especially the first, were rather weak, and reduplication of the second sound was audible at the base. The pulse was 75. The patient's symptoms dated from a severe attack of pneumonia, two years previous to any attendance, his health having been good prior to that time. A diagnosis of weak heart following pneumonia was made, and ten minims each of the tincture of digitalis and tincture of nux vomica t. i. d. were prescribed, the latter being given to correct existing derangement of digestion. After two weeks of this treatment the heart-sounds were louder, but the patient's condition was not materially improved. A single sphygmographic tracing showed no obvious abnormality and was not preserved. Five grains of the citrate of caffeine after meals was now substituted for the digitalis, and one-thirtieth grain of strychnine for the nux vomica. Owing to a misunderstanding the caffeine was at first taken before meals and caused much gastric irritation. When the mistake was corrected the good effect of the drug at once became manifest. His heart-sounds became louder and his disagreeable symptoms disappeared. At first, if he forgot a powder, the sleepiness would return. After two or three weeks the dose was reduced to three grains, and was continued for a week or two longer. Ten weeks after commencing the caffeine treatment he had retained his gain, but had to take an occasional three-grain powder after breakfast, to avoid sleepiness. His weight had been slightly reduced, and a tendency to flatulence was controlled by abstinence from sugar and potatoes. When last seen, twenty-three weeks after the commencement of treatment, he was in a comfortable condition, though still slightly short of breath, and flatulent from dietary indiscretions. His sleepy attacks had recurred two or three times under strain, but had quickly yielded to caffeine, taken without consulting me. The only abnormality noticed about the heart was the persistence of the reduplication of the second sound, which was heard at the end of inspiration and beginning of expiration over the left of third intercostal space near the sternum.

II.—My second case was that of a stock-broker, aged thirty-eight. Several relatives had been gouty, and one had been asthmatic. He had had several slight attacks of gout, and had been much worried about business losses and had been drinking freely, chiefly spirits, for three or four years. He had been short of breath for years on going up-stairs. A former medical attendant had found albumen in his urine. His ankles would become puffy from time to time, especially after drinking brandy. He had been rejected by a life insurance examiner some months before on account of the rapidity of his pulse. He had for some time vomited every morning on rising, the matter vomited being usually mucus, but twice it contained blood. His custom had been to take from twelve to fourteen drinks of whiskey a day, and to eat only one meal, that being in the afternoon. I was called to see him on account of attacks of dyspnœa and wheezing, which had been coming on every night for some time.

I found him to be a pale, worried-looking man, gray, and appearing much older than he was. At my first examination, the dyspnœa was slight. The lungs were normal. The first sound of the heart was weak, the second hard, metallic, and not quite clear. His tongue was coated, and he complained of flying pains in his muscles.

[1] Read before the New York Academy of Medicine, October, 1885.

The urine contained a small amount of albumen, had a specific gravity of 1.024, and one fatty cast was seen after considerable searching. Six days later, after appropriate treatment of the stomach, the stopping of alcohol, administration of food, and the use of morphia and Hoffman's anodyne at night, great improvement followed. He passed something over a quart of urine, of a specific gravity of 1.014, in twenty-four hours, containing no albumen. As soon, however, as he began to go about again, dyspnœa and inability to lie down without distress recurred. The first sound and the apex-beat of the heart were feeble, the pulse 102. His appetite began to fail again. He had occasional shooting pains from the apex of the heart to the scapula.

Ten minims of the tincture of digitalis t.i.d., combined with a bitter tonic, were given—as were also other remedies rendered necessary by the condition of the stomach and bowels. In two days he was able to sleep flat on his back through the night. His pulse dropped from 102 to 84. Its tension, which, as shown by the sphygmograph, was very low before the digitalis was given (Fig. 1),

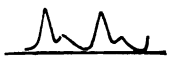

FIG. 1.

FIG. 2.

increased considerably (Fig. 2), but did not become normal. He succeeded in abstaining from alcohol and, when examined six months later, had gained markedly in flesh, no longer suffered from dyspnœa, and, in spite of constant business worry, was in a very comfortable general condition. The first sound was still short and valvular, the second metallic and sharp, the arterial tension low, the pulse 82. The urine showed a faint trace of albumen, by the mercuric iodide test, and a considerable number of hyaline casts.

In this case the patient's abuse of alcohol and underfeeding had undoubtedly caused a pretty general degeneration or state of malnutrition of all his organs. Reform of these habits was the *sine qua non* of his recovery. His rapid and persistent improvement after a course of digitalis, with corresponding improvement in his cardiac action, is proof, however, that his heart was the organ predominantly affected. The normal quantity of his urine, the small amount and inconstancy of the albumen which it contained, the absence of elements in the deposit pointing to active kidney trouble, the persistent low tension of his pulse, and his rapid improvement, go to prove that the albuminuria was probably not associated with grave organic changes in the kidneys. The lesion in this case is conjectural. From the association with abuse of alcohol it may be assumed that the heart was fatty, but the very rapid response to digitalis seemed to indicate that a less grave state of malnutrition probably predominated. There was also a persistent irritability of the heart, due apparently to his mental worry, and analogous to the irritability noted by Da Costa[1] as the result of the physical and moral hardships of campaign life, the abuse of tobacco, etc. It is, I believe, customary to regard these cases of irritable heart as of little gravity. Da Costa, however, has recorded a case of dilatation and hypertrophy following irritable heart due to worry and uterine disease, and also a case of dilatation and hypertrophy, with mitral regurgitation, following irritability from the abuse of tobacco and worry. Similar cases have been recorded by other authorities.

III.—My third case is that of a gentleman, aged fifty-four, who had always been much addicted to outdoor sports. His health had been good until his present trouble began, except that he had always suffered from constipation. Some months before consulting me, he began to suffer from lassitude, drowsiness, indisposition to exert himself physically or mentally, and a constant distressing headache felt chiefly at the vertex. He had been treated for hæmorrhoids by ligature a few months before. His eyes had been recently examined by Dr. Knapp, who told him that they presented the lesions usually associated with myopia, but nothing to explain his general symptoms. For a long time he had been obliged to get up at night to urinate. The immediate occasion of his consulting me was an unusually severe attack of pain in the vertex and back of the head, in part shooting in character, but not following any definite nerve distribution.

The patient was a thin, sallow, anxious-looking man. His tongue was slightly coated. His appetite was good. The apex of his heart was in the sixth interspace in the nipple line, and a very faint systolic murmur was heard at that point. The cardiac sounds, especially the second, were weak. The lungs were normal. He passed about ninety-six ounces of urine in twenty-four hours, the specific gravity of the specimen measured being 1.010½; it contained no albumen. A mixture containing bicarbonate of soda and gentian given for two days, with the idea that the head symptoms might be reflex from the stomach, produced no effect. Of various remedies used for the bowels, faradization only had any effect. Ten minims of the tincture of digitalis and twenty of the tincture of the chloride of iron t.i.d. were now prescribed. During the twelve days that the patient remained under observation, the heart-sounds increased markedly in force, the pulse became stronger, and his general condition improved remarkably. The urine fluctuated in specific gravity between 1.010½ and 1.019½ in four examinations. Its frequency of passage, and presumably its quantity, did not diminish. No albumen or sugar was found. On one occasion a few hyaline casts with adherent renal epithelial cells were seen; spermatozoa were observed in three of the four examinations, and a few pus-globules were always present. It was then ascertained that the patient had been treated for urethral stricture, originating in the usual way, thirty years before. A No. 14 English sound was the largest that could be passed through a constriction two and a half inches back of the meatus. Seminal emissions had occurred, and ejaculation had been painful of late years. From the enlarged heart, and the large amount of urine passed, it was concluded that the patient was suffering from contracted kidneys with secondary cardiac failure, although the specific gravity of the urine was usually normal, and no albumen was at any time found. The patient spent the winter in a southern climate, and remained in a fair state of health, taking no treatment during most of the time, but avoiding exposure and muscular strain. A year after his first course of treatment he presented himself, stating that he was a little short of breath on going up-stairs, that he had no pain but only a sensation of something not quite right in his head, which he could not define, and occasional shooting pains in his arms and legs. His condition was somewhat aggravated by recent unusual exertion. The apex of the heart was in its former situation; the sounds, especially the second, were weak; a distinct reduplication of the first sound was heard to the left of the sternum at the level of the fourth rib, but not at the apex, where the muscular element seemed to cover it. There was no murmur. The sphygmographic tracing (Fig. 3) was of very large amplitude, but the tidal wave was more marked, the aortic notch much higher in the tracing, and the dicrotic wave far less developed than in the second case narrated. The pulse was 75. Digitalis in ten-minim doses t.i.d., first alone and after five days with half a drachm of fluid extract of ergot, continued for ten days, caused a diminution in the amplitude of the pulse, a lessening of the dicrotic wave, and a lowering of the pulse to 64. The sphygmogram, after this treatment, differed from the most common healthy type only in being a little below the average tension. The shooting pains became somewhat less under treatment, but there was no great

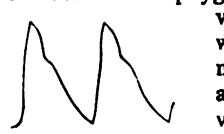

FIG. 3.

[1] Toner Lectures on Heart Strain, 1874.

change in his, at this time, not very markedly disagreeable symptoms, owing probably to unusual exertion and the temporary discomfort of an acute coryza. The urine, examined once, had a specific gravity of 1.015, contained no albumen, and the microscope showed only a few pus- and red blood-globules. He passed seventy ounces in the twenty-four hours.

The facts that the patient had held his own for a year, that the specific gravity of the urine was normal (considering the amount passed), and that the sphygmographic tracing taken on four different occasions showed low arterial tension, even after the heart had been strengthened by appropriate treatment, led me to conclude that the polyuria was due to some cause other than contracted kidney, it being possibly a reflex result of the urethral lesion such as was observed by Masson [1] in four per cent. of the cases of stricture studied by him. Masson found polyuria, especially in patients with stricture of long standing. After treatment of the strictures the polyuria disappeared or lessened. My patient did not remain under observation long enough at any one time to enable me to test this question by treating the stricture.

The cardiac failure, therefore, seemed to be an independent matter. The age of the patient (fifty-four years) points to an early stage of one of the chronic degenerative processes. His addiction to athletic sports suggests the weak, dilated heart without recognizable histological change, such as has been noticed by Münziner [2] among the Tübingen vine-dressers, who are accustomed to carry heavy loads on their backs in a hilly country, or the cardiac dilatation observed after Alpine climbing;[3] but any absolute conclusion on this point seems impossible.

IV.—My fourth and last case can hardly be classed as one of obscure cardiac weakness, as the symptoms were very striking. I introduce it on account of certain features of especial interest which it presents. The patient was a boy aged fourteen, who had a severe attack of measles last May, he having been previously in good health. After his convalescence, he suffered from dyspnœa and lancinating pain in the cardiac region on running. He was admitted into the Randall's Island Hospital on July 30th. The boy was thin and pale. Cardiac pulsation was marked over the apex, in the epigastrium, and in the second left intercostal space. Both ventricular areas were enlarged. The heart-sounds were loud. Distinct reduplication of the second sound was audible in the third left interspace near the sternum. A loud blowing systolic murmur was heard over arteries at the base of the neck, and was transmitted into the brachials and femorals. Under iron, strychnia, and rest the boy's general condition improved; the dilatation of the heart had diminished; the arterial murmur had disappeared, the venous hum had lessened, and the reduplication of the second sound still persisted at my last examination.

Although endocarditis and pericarditis occur as occasional complications of measles, the absence of cardiac murmurs and the rapid improvement, both local and general, point to the condition as one of cardiac dilatation, with perhaps some fatty degeneration such as has long been recognized as occurring in long-standing anæmia, especially in chlorosis; the dilatation sometimes proceeding so far as to cause relative incompetence of the mitral valve and consequent regurgitation.

On reviewing this little group of cases, attention is arrested by the fact that reduplication of one or other of the cardiac sounds was present in three of them. The etiology of this phenomenon has been much discussed. The simplest explanation is, that the reduplication of the first sound is due to asynchronism in the contraction of the ventricles; that of the second to asynchronism in the closing of the outer and pulmonary semilunar valves. Bramwell is of the opinion that this is the explanation in at least the great majority of cases. Other high authorities have invented a number of ingenious hypotheses to meet certain cases in which there are apparent objections to this simple theory. These alternative explanations, being apparently incapable of *experimental* proof or disproof, must be accepted or rejected on purely theoretical grounds. None that I have met with seem to my mind mechanically possible. Dr. Bramwell [1] states that he has seen, felt, and heard asynchronous action of the ventricles. "Each side" of the heart, he says, "has more or less independently its own nerve-supply, its own peristaltic action; and notwithstanding that both sides are set to the same time, and that there is a complex interlacement of fibres, yet it is quite possible, nay, it is an experimental fact, that one side may begin or end contraction before the other." It therefore seems to me that Bramwell's opinion is correct. Both forms of reduplication are said to occur physiologically as temporary phenomena, owing to the effect of the respiratory movements on the circulation, especially when those movements are forcible. Reduplication of the first sound occurs at the end of ex- and beginning of in-spiration. Reduplication of the second sound, at the opposite point of the circle, *i.e.*, at the end of in- and beginning of expiration. The physiological stimulus to contraction of the ventricles is recognized to be the distention of their cavities with blood. One ventricle may therefore contract before the other, according to Bramwell, when either the blood-pressure in one is greater than in the other, or when, the blood-pressure being the same, one ventricle is more irritable than the other, owing either to a relatively greater derangement of its nerve-apparatus, or to structural changes in its muscular wall. The lack of synchronism caused by the influence of respiration is due probably to the fact, that at the end of expiration more blood is actually delivered to one ventricle than to the other. Usually during tranquil respiration the lack of synchronism, though probably present, is not sufficient to be appreciable. In the case above cited of the patient with a dilated left ventricle resulting possibly from heart strain, the reduplication of the first sound was heard during tranquil respiration on two different occasions, and was therefore probably not of the physiological type.[2] There existed manifest dilatation of the left, but not of the right, ventricle. Now the amount of blood delivered to each ventricle at a given cardiac contraction is about the same, the variations caused by respiration being probably unimportant so long as that act is tranquil. The undilated right ventricle would therefore be more distended than its dilated fellow by a given quantity of blood, and would consequently contract sooner, thus giving rise to a reduplication of the first sound. The contraction of a weak ventricle is, however, less sustained than that of a normal one, so that, in spite of a later start, the left ventricular contraction might terminate synchronously with the right. It must be borne clearly in mind that it is here a question of intra-ventricular pressure during ventricular *diastole*. In other pathological cases, as above stated, it may be a question of a disturbed balance of the relative irritability of the ventricles. Marked degeneration or nervous derangement may exist, but as long as both ventricles are equally affected no reduplication would be produced. Apart, however, from purely theoretical speculations, which some unknown or unconsidered factor may entirely vitiate, persistent reduplication of the first sound has been found clinically associated with functional disorders of the heart, and with grave organic changes of the cardiac muscle with or without valvular disease. It is at least within the limits of our present knowledge of the subject to say that its presence in a given case is presumptive evidence of some cardiac lesion, the character and gravity of which must be determined by the other factors of the case.

[1] V. and H. Jahresber., 1880, ii., p. 216.
[2] Das Tübingen Herz., Arch. für klin. Med., vol. xix., p. 449.
[3] Overstrain of Heart and Aorta (with discussion). Allbutt: Brit. Med. Jour., March 15, 1873.

[1] Bramwell: Diseases of the Heart, 1st ed., p. 160 (note).
[2] My recollection is that it was also continuous, *i.e.*, not depending on respiratory influences, but my notes of the case are not specific on this point. Such reduplication would of course be entirely unphysiological.

In the case of the second sound, reduplication may be due either to derangement of the nerve-apparatus, or lesions of the muscular fibres of the heart, which cause the contraction of one ventricle to be shorter than that of the other, or to disturbances in the relative amount of resistance to be overcome by the respective ventricles. The semilunar valves must close the moment that the arterial tension is greater than the pressure from behind. Increased resistance, however, is met by increased vigor of contraction on the part of the ventricle upon which the strain comes. This increased vigor of contraction involves a lengthening of the ventricular systole. It is this increase which, according to some authorities, gives rise to the reduplication of the second sound, which is observed in a large percentage of cases of mitral stenosis, the right ventricle in this case being called upon to make so prolonged an effort in the performance of its work that the closure of the pulmonary valve is later than that of the aortic. There are objections to this theory advanced by high authorities, such as Guttmann and Sansom. My limited time will not permit me to consider these objections in this place. I must content myself with remarking that to me the objections offered seem to admit of plausible answers, but the alternative explanations seem improbable. The reduplicated second sound in the case of dilated heart in an anæmic boy, above cited, was probably one in which the high tension of the greater circulation, shown by the sphygmograph, together with a factor to be mentioned later, caused a prolongation of the left ventricular systole, thus causing a reduplication, in which the aortic element was the last (Fig. 4).[1]

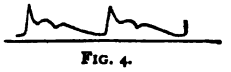

FIG. 4.

When the peripheral resistance in both circulations is normal, reduplication of the second sound may be supposed to occur from unequal length of contraction in the ventricles, due to a preponderance of muscular degeneration or nervous derangement in one as compared to the other. Possibly the reduplicated second sound in the case of weak heart following pneumonia, cited above, was due to enduring predominant weakness of the right heart, upon which the greater strain comes in that disease. Its shorter contraction would, in that case, make the pulmonic the first element of the double sound.

It is theoretically conceivable that in mitral stenosis, for example, a time would arrive at which the ventricle upon which the extra strain was thrown would lose its power of prolonged contraction owing to advancing degeneration, and that a reduplication which was present earlier in the case would disappear. This seems to me to be the answer to Guttmann's most formidable objection to the above-accepted explanation of reduplication of the second sound in these cases, his objection being that the reduplication is often absent in the most marked examples of the lesion. Now, it is in precisely those cases in which we would expect secondary failure of the right ventricle.

Again, it is conceivable that an obstruction to either circulation which would not produce a sensible prolongation of the systole of the affected ventricle in health, might have that effect when *both* ventricles were somewhat weakened. In such a case the contraction of the unobstructed ventricle would be shorter than normal. The systole of the affected side would be longer than that of the other, but still not as long as the contraction of a healthy organ would be in parallel circumstances, *i.e.*, when acting against an obstruction which bore the same proportion to its strength. These considerations may explain why, in the case of the anæmic boy, the increased arterial resistance was able to cause a perceptible reduplication of the second sound. In the case of weak heart resulting from the abuse of alcohol and general malnutrition, the cause being a general one, both ventricles may be supposed to have been equally affected. The absence of a reduplication of the second sound in this case may have depended on the low arterial tension.

Apart, however, from all theory, as a matter of clinical observation, reduplicated second sound is so frequently associated with obstructions to the greater or lesser circulations, with lesions of the cardiac muscle, or with a combination of both, that its occurrence, as in the case of reduplication of the first sound, should lead to a careful study of the case, with a view to determining the presence or absence of important cardiac disease. In my case of weak heart following pneumonia, the reduplication of the second sound was heard, when last listened to, only at the end of inspiration and beginning of expiration, *i.e.*, it was of the normal type. The patient's condition at the time was comfortable, and an observer knowing nothing of his former history might readily have concluded that the sign was without significance. The facts that he was still slightly short of breath on exertion, that his morbid symptoms had returned under strain on two or three occasions, and that the reduplication was heard during quiet respiration, go to prove that such a conclusion would be incorrect.

Weakness of the first sound of the heart, accepted generally as an indication of cardiac debility, was present in three out of the four cases. In the case of dilated heart in an anæmic boy, however, the first sound was sharp and ringing. Reference to the sphygmographic tracing (Fig. 4) shows that the condition of high arterial tension common in anæmia was present. Recalling the fact that during ventricular systole the cavities of the ventricle and aorta are continuous, and that vascular tension is produced by the *resistance* to the flow of blood, it is at once evident why weak cardiac contraction may yet be accompanied by a loud cardiac sound.

A striking feature, however, of Cases II. and III. was that even when after treatment the ventricles were acting fairly well, as indicated by the improvement in the symptoms of the patients, yet the first sound of the heart, though stronger than before, was still noticeably weak, and there was no extra-cardiac factor, such as thickness of the chest-walls or emphysema of the lungs, to explain that weakness. On referring to the sphygmograms (Figs. 2 and 3), the explanation is obvious.

In both these cases persistent low mean arterial pressure was present, a condition due obviously to persistent dilatation of the small arteries. At the moment of the ventricular systole, therefore, the blood met with very little resistance on entering the aorta. Consequently the intracardiac pressure and the reverberation of the valves thereon depending, remained below normal in spite of the more vigorous contraction of the ventricles. It is obvious, therefore, that in interpreting the meaning of a short, weak valvular first sound, the peripheral resistance to the circulation is quite as important a factor as the strength of the ventricular contractions.[1]

Another striking point of contrast between these cases was, that in the weak irritable heart following the abuse of alcohol the second sound was loud and metallic, while that in the case of dilated heart following muscular strain was markedly weak.

Referring again to the sphygmographic tracings, in the former it will be observed that the pulse wave is pointed and the tension falls off without interruption (Figs. 1 and 2), showing a quick, sudden ventricular contraction. The semilunar valves close, of course, at the moment that the pressure in the aorta becomes greater than that in the ventricle. In this case, from the form of the ventricular contraction, it seems obvious that the valves were

[1] In the interpretation of this tracing, it is to be remembered that the patient was young (fourteen years), and his arteries therefore elastic. The rapid falling off of the primary wave is the result of this factor. The high tension of the vessel is shown by the gradual descent of the pulse wave from the "tidal wave" onward.

[1] I do not know that this condition of permanent relaxation of the peripheral arteries has been or can be regarded as a distinct pathological entity. I have somewhere seen the statement, though I have not been able to recall the reference, that persons in whom this condition exists show very little power of resistance when attacked by serious acute disease.

closed by the full force of the retraction of the aorta, unresisted by any pressure from behind. In the second case, however (Fig. 3), the presence of the tidal wave and the higher position of the aortic notch in the tracing show that the ventricle contracted more gradually, and that the aortic valves were probably closed in the face of a still advancing column of blood, their vibration being consequently weaker than in the former case. In interpreting, therefore, the meaning of a strong or a weak second sound, it is necessary to consider not only arterial tension, but also the form of the ventricular contraction. It must be remembered, however, as Cohnheim insists, that many degenerated hearts functionate in an absolutely normal manner, so long as the demands upon them are within their ability to respond. In such cases diagnosis can be made only on such evidence of cardiac distress *under strain* as the history of the patients may furnish. I am convinced, however, that closer observation and analysis of the less striking evidences of deranged cardiac action would greatly lessen the number of cases of grave cardiac lesion which remain totally unsuspected during life, with which most physicians, who have opportunities for comparing their ante-mortem diagnoses with the revelations of the autopsy room, are probably only too familiar.

In conclusion I desire to say a few words about the contrasted action of the two cardiac tonics, digitalis and caffeine, suggested by the above cases. According to the careful experiments of Riegel,[1] caffeine, like digitalis, slows the action of the heart and increases the amplitude and tension of the pulse, both in health and disease. In cardiac failure, like digitalis, it renders the heart contractions more regular, increases the amount of urine, and decreases the amount of albumen and the specific gravity. The slowing of the normal pulse by caffeine is spoken of as moderate. It differs from digitalis in its more rapid action and in the absence of cumulative effect. In some cases of failing heart caffeine was efficient after digitalis was found useless. In the above-cited case of weak heart following pneumonia, digitalis, given in doses which are ordinarily efficient, produced little or no good effect, but improvement followed at once on using caffeine. In Cases II. and III. marked improvement followed the use of digitalis. In the first case the sphygmograph showed no abnormality of the pulse tension. In the other two a permanent relaxation of the peripheral arteries was shown to exist. It is an old theoretical objection to digitalis that in a patient with degenerated heart the contraction of the peripheral arteries which it causes may more than offset its tonic effect on the cardiac muscle, the heart being unable to respond to the stimulus by virtue of its degeneration. Bramwell cautions against its use in fibroid heart on this ground. Trousseau[2] states that certain cases of dilated heart are made worse by it. It is suggestive that in the two cases cited above, that were benefited by digitalis, the tension of the pulse was only slightly increased by its administration. There seemed to exist a permanent dilatation of the peripheral arteries, upon which digitalis produced little or no effect. In the case which was not benefited, as far as could be judged from a single tracing, arterial tension was normal. It seems plausible to suppose that the contrasted effects of the two remedies may lie in the slighter influence of caffeine on the vaso-motor apparatus. This suggested explanation requires, of course, further study.

The fact remains nevertheless, that caffeine sometimes is efficient when digitalis fails. In Riegel's experience the contrary was the case in only a single instance, and in that the caffeine could not be tolerated on account of the gastric irritability and cerebral excitement which it caused. These symptoms are, however, not often produced. The greater safety and more rapid action of the drug point to it as preferable to digitalis as a cardiac tonic in heart failure occurring in acute diseases or primary degenerative processes of the cardiac muscle. The soluble and stable combinations of the drug with salicylate or benzoate of soda are to be preferred to the insoluble and unstable so-called citrate which has been long in use. It should be given in divided doses, at first small, but pushed as high as two grammes daily, according to Dujardin-Beaumetz,[1] if smaller doses are not efficient.

In my narration of cases and my comments I have probably said little that is not already known to many of my hearers. I believe, however, that cases of the kind under discussion do not, in practice, receive the recognition which their frequency and importance deserve. It has *not* been my aim to treat my subject exhaustively, but to call attention to the fact that conclusions of the greatest practical importance can be arrived at, not by rule-of-thumb diagnosis, but by careful study of the symptoms and less striking physical signs present in *individual* obscure cases of weak heart.

26 East 125th Street.

[1] Berlin. klin. Wochenschr., v. xxi., 1884, p. 289.
[2] Trousseau and Pidoux: Traité de Thérap., 9th ed., t. ii., p. 1091.

NOTE ON THE THERAPEUTICS OF HAY-FEVER (SO-CALLED).

By BEVERLEY ROBINSON, M.D.,

NEW YORK.

The proper season for a contribution on this subject, be it never so brief, has in the opinion of many come to an end. To my mind this is not true. Of course, if I were willing to admit that "cocaine" is the panacea for this troublesome disease, as the daily press and a few of our prominent medical brethren believe, I should be willing to await the advent of another summer, or autumn, before I felt called upon to "mark time" with other observers.

But this is not my conviction. Neither cocaine nor the relative severe means of the electro-cautery appears to me essential in redeeming our hay fever victims from actual or future attacks. Within a period of a few weeks, I have been called upon to treat three sufferers from hay fever. In the first case, that of a young lady of a neighboring city, the attack of hay fever was *evidently* occasioned by a sudden and considerable fall of temperature, and had nothing to do with the *pernicious pollen*, or a *derangement of the nerve-centres*. To this patient, and in anticipation of an attack, her physician had given a four per cent. solution of hydrochlorate of cocaine. When the periodical attack of hay fever took severe hold of her, when sneezing was repeated and violent; when the conjunctivæ were red and swollen, when rest at night was impossible, on account of the severity of dyspnœa due to asthma, cocaine was repeatedly and faithfully tried. At first it was dropped into the nasal passages; later it was used in the form of a fine spray. During two days partial relief was afforded, so far as the symptoms of *sneezing* and *nasal obstruction* were concerned. Subsequently the sneezing was stopped for a short time, but the obstruction was more marked, and the asthma was not at all relieved. Thereupon I made a very thorough and complete application of carbolic acid, one part, glycerine, three parts, to the nasal mucous membrane and gave very great temporary relief, which, indeed, lasted almost twenty-four hours. The following day I repeated the local application and had no further occasion to make use of it. The sneezing, nasal obstruction, and bronchitic asthma had nearly disappeared, and a few days later my patient was entirely well.

Since the time I treated the case just reported I have had two others under my care, marked, however, by more or less continued nasal occlusion, but having already passed beyond the period of paroxysmal sneezing. In neither of these cases was there any asthma, or nota-

[1] Bull. gén. de Thérap., 1884, cvii., 97-111.

ble ocular suffusion. Cocaine had been used freely and often. It had relieved during the first few days in a temporary manner; subsequently it had increased nasal obstruction. What I have noticed in this place in regard to hay fever, I have already seen several times, where cocaine had been used frequently in the nasal passages, for other diseases, viz.; that it causes secondary occlusion of the nasal passages, due, as I believe, to a paralytic condition of the turbinated structures caused by its action. In my two late cases of hay fever I obtained notable relief by two or more applications of carbolic acid, one part, glycerine, two parts, but not to the remarkable degree that I did in my first case. I explained this by the fact that these were very different as regards the pathological conditions present. In one case there was considerable thickening of the septum, and a small bony exostosis situated posteriorly in the nasal passages; in the second case there was septal deviation and marked posterior turbinated hypertrophies with bands of membranous tissue going from the right inferior turbinated body to the posterior border of the septum. These cases were much benefited for the while by alterative ointments and applications of compound tincture of iodine. Subsequently, they may both require the use of the cautery, or that of the saw and rougene forceps. These patients' general condition was unimpaired; at all events there was no satisfactory evidence of a hyper-sensitive state of the "cervico occipital sympathetic."

I spoke two years ago, at a meeting of the Laryngological Association, in the city of New York, of a case of hay fever much benefited by applications of carbolic acid. I again wish to direct attention to its use at the present time. I presume it does good, when it is of any use, mainly by modifying or destroying "sensitive areas of mucous membrane." I do not yet know whether it will accomplish its purpose as well as the galvano-cautery, but I have, at least, some ground for this belief.

Certainly, the cautery is not applicable to *all organic diseases* of the nasal passages, and I am, also, *now* of the belief that in the majority of cases, hay fever is quite *independent* of any morbid condition of the *nerve-centres*. It seems to me apropos to make this statement, in view of Dr. J. H. Mackenzie's elaborate, but somewhat speculative articles, all pointing to an omnipresent "rhinitis sympathetica," or of Dr. Morell Mackenzie's remarkable apology for the nearly discredited *pollen theory* of hay-fever among scientific observers.

EATING GLASS FOR A LIVING.—Dr. C. C. Burke, of Texarkana, Tex., sends us the following curious account, for the authenticity of which he vouches: "I witnessed on our streets a few days ago what seemed to me to be an impossibility, a human being eating glass, I might say by the wholesale. I had heard of the negro before he reached our town, and I, like all others, disputed his ability to eat the glass without its doing him serious injury. When he arrived in our city I witnessed his exhibition, both in private and public, and I am now thoroughly satisfied, from careful examination of his mouth and throat, before and while eating the glass, that he eats it fairly and squarely. He is not very particular to chew it fine. I saw a piece in his mouth, after he had chewed it, one-quarter by one-half inch long, made into all kinds of shapes and sizes by crushing it with his teeth. He informed me that he had been at it for twenty years, and had never had the least discomfort from its effects. He told me that he has daily passages of glass through the bowels. He eats it in any quantity from a small piece to a whole lamp-chimney at a time, and keeps it up during the day, making his living by exhibiting his extraordinary power of eating glass."

CLINICAL.—Science is good, Experience is better, Art is best of all.

THE METRIC SYSTEM IN MEDICINE.

BY LLEWELLYN ELIOT, M.D.,

WASHINGTON, D. C.

BEING one of the pioneers in the introduction of the metric system of weights and measures into general use among physicians and druggists of Washington, I feel, to a certain extent, competent to judge the manner of its reception. When, in 1881, the writer made his first attempt in this direction, there were but few of our druggists able, without the assistance of tables and rules, to compound metric prescriptions. To this day there is an undercurrent of opposition to its adoption. Considered as a system its workings are as simple as are those of the old and familiar one so long in use; as to accuracy there is but little or no appreciable difference. For simplicity of rules for conversion and reconversion of quantities it is unequalled. Still, with all of these advantages, it will be many years before its general adoption. Its scale—deci, centi, milli, deca, hecto, kilo—is as simple of application and as easy to remember as the grains, drachms, and ounces of the old system. With the educators, medical and pharmacal, rests the ultimate success and adoption of this method of prescribing and compounding prescriptions, but compulsory measures will undoubtedly fail.

The table which is given below is one which I prepared some years ago, and has a degree of exactness which the revised or American system lacks. By reference to it we see that it is based upon .067 gm. (sixty-seven milligrammes), and to correctly follow it there must be three decimal figures. In expressing any quantity of grammes the word gramme should be abbreviated and underscored, thus, gm. The terms decigramme, centigramme, milligramme must never be used except in reading the quantity; in this way mistakes will be avoided. A good way to preserve regularity and prevent errors on the part of the prescriber, as well as on the part of the druggist, is to have a line running down the blank used, to take the place of the decimal point.

TABLE OF METRIC EQUIVALENTS.

Gr. or Min.	Gm. or C.c.	Gr. or Min.	Gm. or C.c.	Gr. or Min.	Gm. or C.c.
1/100	= .0001675	1/3	= .022	22	= 1.466
1/80	= .00026	1/2	= .033	24	= 1.600
1/60	= .00033	3/4	= .050	26	= 1.733
1/48	= .00050	1	= .067	28	= 1.866
1/30	= .00067	1 1/2	= .100	30	= 2.000
1/16	= .00065	2	= .133	32	= 2.133
1/12	= .00083	3	= .200	33	= 2.200
1/15	= .0010	4	= .267	34	= 2.267
1/90	= .0011	5	= .333	36	= 2.400
1/80	= .00134	6	= .400	38	= 2.533
1/75	= .0013	7	= .467	39	= 2.600
1/60	= .001675	8	= .533	40	= 2.667
1/50	= .0020	9	= .600	42	= 2.800
1/45	= .0025	10	= .67	44	= 2.933
1/30	= .0033	11	= .733	45	= 3.000
1/25	= .0041	12	= .800	46	= 3.067
1/18	= .0055	13	= .867	48	= 3.200
1/15	= .0066	14	= .963	50	= 3.333
1/12	= .008	15	= 1.000	56	= 3.733
1/9	= .011	16	= 1.067	60	= 4.000
1/8	= .0134	18	= 1.200		
1/6	= .01675	20	= 1.333		

1 gr. or min.	= .067 gm. or c.c.	1/8 inch	= .0125 mm.
1 dr.	= 4. gm. or c.c.	1/4 inch	= .00625 mm.
1 oz.	= 32. gm. or c.c.	1 kilo	= 1,000 gms.
1 inch	= .025 mm.	1 litre	= 32 oz.

The following rules will be found of service in teaching and studying this system:

1. To convert troy grains or minims into grammes or cubic centimetres: Divide the number by 10, and from the quotient subtract one-third.

2. To convert apothecaries' or fluidrachms into

grammes or cubic centimetres: Multiply the number by 4.

3. To convert troy or fluid ounces into grammes or cubic centimetres: Multiply the number by 32.

4. To convert grammes or cubic centimetres into troy grains or minims: Add fifty per cent., or one-half the number, and then multiply by 10.

5. To convert grammes or cubic centimetres into apothecaries' or fluidrachms: Divide by 4.

6. To convert grammes or cubic centimetres into troy or fluid ounces: Divide by 32.

7. To convert inches into metres: Divide by 40.

8. To convert metres into inches: Add ten per cent., or one-tenth the number, and then multiply by 36.

510 E STREET, N. W., September 29, 1885.

THE COMPARATIVE RESULTS OF OPERATIONS IN BELLEVUE HOSPITAL.

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As we drift with current events, we but imperfectly estimate the real advance which any art or science, with which we are daily familiar, has made within a limited period. It is only when we considerately pause and deliberately compare, in detail, past methods and results with those now practised and obtained, that we fully appreciate the vast changes which have so insidiously and imperceptibly taken place.

Perhaps there is no better place in which to test the progress of practical and operative surgery than the wards of Bellevue Hospital. This ancient institution has within its walls and its immediate environments all the conditions that in modern times are regarded as unhealthful and unsanitary. It was built between the years 1811–16, on the made lands of a cove of East River, without drainage, or adequate sewerage, and without regard to ventilation. During nearly three-fourths of a century the sluggish tides have ebbed and flowed through the sodden soil of its foundation, depositing far more filth than they have removed. Since its occupation it has been used for a prison, an almshouse, and a hospital. Its wards have, from time to time, been crowded with patients suffering from all forms of contagious and infectious diseases. It has been the common receptacle of typhus and typhoid fevers, small-pox, puerperal fever, cholera, and yellow fever. Although many changes have been made in its interior, yet the great and most serious defects of location and construction have remained unaltered, and may be regarded as permanent.

Bellevue may be regarded as having been a surgical hospital only since 1850, a period of about thirty-five years, during most of which period I have been personally very familiar with the practice in the several surgical divisions. The amount of surgery in the wards of Bellevue has been a gradual increase. With the removal of the New York Hospital, and during the long interval of its non-existence, the surgical practice of Bellevue became large and important, and has remained so to the present time. The surgeons of Bellevue have always ranked among the best in the city, and, as much of their practice in hospital has been public and clinical, it must be assumed that they have endeavored to the best of their ability to illustrate to their classes the highest type and best results of the science and art of surgery of their day. And yet the practice of surgery in Bellevue Hospital has, within the period mentioned, undergone so complete a revolution that one of the older surgeons would scarcely realize that he was in the same hospital where he had practised a decade ago. He would see, with horror, operations fearlessly performed that he had formerly regarded as without the pale of legitimate surgery. He would witness procedures in the after-treatment of operations which would seem to him to be fantastic, and even ludicrous. His astonishment would be extreme on finding that the first week passed without fever, and that no change in the dressings had been made. But, perhaps, the most remarkable feature of modern practice would be the rapid convalescence and final complete recovery without complication or exhaustion of ordinary operations, which formerly gave so much trouble and anxiety. To make more evident the change in practice, we may contrast in detail the several steps of operations in general, and of individual cases, the methods of treatment, and the results.

The older surgeons of Bellevue Hospital had practised in the period anterior to the use of anæsthetics. The most important general principle governing the operator was *celerity*—in order to limit as much as possible the amount of pain. Long after anæsthetics came into general use surgeons dwelt with much emphasis upon the necessity of cultivating the habit of operating rapidly. The preparations for an operation were all made with reference to this one feature. So much did this thought absorb the operator that he often became excited and annoyed by the delay. One surgeon, noted for the rapidity of his operations, was often seen, during the last moments of preparation for an amputation, to seize involuntarily the saw and move it rapidly, as if sawing a bone. Now, while every surgeon aims to diminish the period of anæsthesia, mere haste at an operation is only mentioned to be condemned. No part of the elaborate preparations are designed to render the operation simply more rapid. One thought and purpose occupy the mind of the surgeon, and that is recovery without suppuration. To this end all his preparations are made, and the entire procedure is subordinated. Formerly the surgeon prepared his instruments only by keeping them free from rust, and giving them a fine edge. When he operated the instruments were taken from the case, and, without any cleansing, were so placed that he could most readily select the one required. During the operation he laid them down, or dropped them, and without cleaning applied them again to the wound. Now instruments are not only protected from rust and all soiling and kept sharp, but long before the operation they are placed in a carbolic solution, in order that any possible septic matter on them or their handles may be destroyed.

During the operation one assistant devotes himself entirely to the duty of handing the instruments to the operator, and of receiving them from him and at once submerging them in the disinfectant liquid. To avoid the possibility of laying an instrument down on an unclean surface, and then putting it in the wound soiled, towels wrung out of the antiseptic fluid are spread around the wound.

In preparing a part for an operation, as amputation, the surgeon used to do nothing farther than, perhaps, to have superfluous hair shaved off, and that, too, often without soap and water. Patients brought directly from the street or shop, with limbs begrimed with dirt and filth, were subjected to operations without bathing. Even when there was ample time for preparation little or no thought was given to the immediate condition of the part about to be incised. The accumulated secretions of the skin, and the dead epidermis, charged with poisonous animal matters, became part of the wound and its immediate surroundings. Through this layer of filth the surgeon passed his knife into the living tissues beneath, conveying to the deepest parts of the wound matters of untold septic virulence. In this simple failure to secure ordinary cleanliness of the surface, more wounds were poisoned and induced to suppurate than from any other cause. In the closure of the wound the filthy margins were often brought in direct contact with the cut surfaces, and thus the propagation of the germs of fermentation or putrefaction were implanted in a fertile soil. Now, the greatest pains are taken to cleanse the part about to be operated upon. In addition to a general bath, the entire limb, including the hand or foot,

is washed with soap and water, with a flesh-brush, and all the hairs are shaved cleanly from the part. This washing is followed by a douche of an antiseptic solution, and then all the parts adjacent to the wound are covered with towels, wrung out of bichloride solution.

The personal preparation of the surgeon and his assistants for the operation was limited to self-protection against soiling their clothes or person. No special thought was ever given to the condition of the hands and nails. The assistants came directly from other ward duties, their hands soiled by contact with the thousand impure matters which they must handle, and with slight or no washing, engaged actively in the manipulations of the operation. Now the surgeon and his assistants take infinite pains with their hands. Soap and water and the flesh-brush are brought into active use, to be followed by a douche of bichloride solution. The nails, the most fertile source of filth in the body, are rendered scrupulously clean. Many will recall with a shudder the long claw-like nail of one surgeon, which penetrated, unwashed, every wound where he was present. Not only is no bystander invited to put his finger in the wound, but scarcely an attendant at Bellevue would allow such an intrusion.

The sponges of former times were universally believed to be the carriers of filth to the wounds, and yet little was done to purify them except to cleanse them in water. They may have been boiled at first to free them from sand, but they were not purified by any adequate means when first prepared, nor after their use in suppurating wounds. Now, the process of purification of sponges is elaborate in the extreme, and is so exact in details as to render them positively harmless in wounds.

The ordinary silk ligatures were formerly regarded as necessarily foreign bodies in wounds, and no care was taken of them to improve their condition. They were carried about in any convenient pocket, and at the operation the silk was cut of proper lengths, waxed, and then drawn through a buttonhole of an assistant, or laid on any convenient surface. Now, the ligature thread undergoes a long process of cleansing and disinfection at the hands of a chemist, and is then applied to a reel enclosed in a corked bottle filled with antiseptic fluid. From this bottle it is removed only as it is drawn out at the moment of using it. Considering the well-recognized fact that the ligature, as formerly used, was an intense irritant to wounds, it is not surprising that surgeons applied as few as possible. From time to time they resorted to other methods of closing arteries, as by torsion, or metallic wires, to avoid the use of silk. But all these devices bore no comparison to the simple and efficient antiseptic ligature of to-day. Reeled off from the bottle, clean, strong, and supple, the surgeon applies them without other limit than the complete suppression of hemorrhage.

Recognizing the silk ligature as an irritant, the surgeon always used to cut off but one end, and left the other end depending from the wound, to be removed by traction when it had finally separated from the end of the vessel to which it had been applied. And well and faithfully did the ligature meet its indications, for, during the first week, the most critical period in the history of the wound, it did not fail to induce free, and often profuse, suppuration. But now, not only does the surgeon freely apply the ligature, but he cuts off both ends, and closes the wound as completely as if there was no foreign substance left between its surfaces. Nor is he disappointed. No suppuration follows the presence of the ligatures, and union takes place as promptly as if no ligatures had been used. The operation being completed in the shortest possible time, the operator concluded by exploring all parts of the wound with his unwashed fingers. If it was a hernia, he thrust his fingers as far into the abdominal cavity as possible, and explored it freely. This act completed, it was a very common occurrence, also, for the surgeon to invite any bystander to examine the wound with his fingers, and sometimes several persons would avail themselves of the opportunity to improve their tactual sensibilities.

Many a wound, that may possibly have escaped previous poisoning at the hands of the operator and his instruments, has received its final charge of septic matters from the dirty fingers of a casual looker-on. Now, the most scrupulous care is taken to protect the wound from injury, either at the hands of the surgeon or his assistants. Exploration is cautiously made with fingers cleansed and disinfected, and even that act is completed by a douche, over the entire surface examined, of the bichloride solution. If the finger of a bystander were introduced into the wound unwashed and undisinfected, the surgeon would regard the act as probably fatal to recovery without suppuration. Hence, no one is now invited by courtesy, or to obtain an opinion, to examine the wound by digital exploration unless they have made due preparation for the act.

In closing an ordinary wound the surgeon formerly took great pains to provide for the drainage of pus. The most dependent part of the wound was left open, and all of the ligatures were drawn out at that point. The edges of the skin were brought into apposition by the interrupted suture, at intervals of half an inch, and the intervening skin was approximated by adhesive plaster. The suture and adhesive plaster were alike unprepared by any process that would relieve them of filth, and far too often both contained the germs of putrefaction. Now the surgeon employs sutures that, like the ligatures, have been relieved of all possible elements of poisoning, both in their preparation and in the method of preserving them. In closing the wound he aims to avoid suppuration altogether, and to secure the immediate union of parts. The suture being non-irritating, he freely stitches together all the deeper structures first, wherever they can be approximated, and then the more superficial parts are brought into firm and exact apposition. Instead of the interrupted suture, which leaves the wound gaping at intervals, and necessitates the use of adhesive plaster, he employs the uninterrupted, or glover's suture, which closes the wound throughout, and relieves it of all necessity of additional support. Wherever there is liability of the collection of fluid from the immediate drainage of the surface of the wound, he inserts a drainage-tube, as a temporary expedient to prevent distention of the wound, and possible putrefaction. The advantages of this latter dressing over the former are apparent. No irritant is allowed to enter the wound. The suturing of the deeper structures brings into close and permanent apposition parts that formerly separated.

The continuous suture has great advantages over the interrupted suture, especially when it is taken deeply in the margins of the wound. It not only brings the surfaces into firm apposition at the points where it traverses the wound, but by whipping the edges, in the parlance of the tailor, where it passes over the wound externally, it relieves us of the necessity of any additional supporting dressings. The advantages of this method of dressing, therefore, are great, and, indeed, vital, in the effort to secure immediate union.

The final dressing of the wound formerly was the adhesive plaster and the bandage for support and retention. The plaster was never rendered aseptic, and by its close relations to the wound was dangerous. The bandage was usually of unbleached muslin, and had no special cleansing or preparation for the wound. It may not have been harmful, but it added to the risks of infection. Now, the wound once closed, is protected from external infection by dusting the surfaces with iodoform. Then pads of disinfected materials, with iodoform sprinkled between the layers, are applied; sometimes over a large area around the wound, and in considerable numbers. The whole is retained by bandages of disinfected materials, carefully preserved in a disinfected atmosphere. The

addition of these external dressings, prepared with so much care, and adjusted with so much painstaking, has been very much criticised. It is possible that they are often unduly multiplied, but the results justify the faith which so many surgeons have in them.

In speaking of the closure of wounds, it should be stated that while the older surgeons did not close many wounds, as those of exsection, surgeons now close all such wounds. This difference in treatment is one of the most striking features in the comparison of the surgery of the present time and that of a decade past. The former surgeon prepared the wound for suppuration, the later surgeon dressed it as for union without suppuration. Both uniformly realized their expectation.

If we follow the wounds treated by these two methods from the first to the last dressings, the contrast is remarkable. If the wound were large, on the second or third day the fever formerly began, announcing suppuration, and from this date, for weeks after, the dressings were changed daily, one, two, or three times. The pus-basin, the irrigator, and the dressing-forceps were in constant demand. In many wounds the suppuration was so profuse that vessels were placed under them which received the continuous discharge. The fever generally ran high, with consequent exhaustion and depression of the patient. Septicæmia, as we now understand it, was the intermediary fever of that day, and was regarded as a usual, if not a necessary, sequel of all considerable operations. Following this fever, or rather insidiously engrafted upon it, were chills, fever, and profuse sweatings, now recognized as pyæmia, but then regarded as only another stage of surgical fever. Few indeed survived this fever; and in the diffused or metastatic abscesses revealed at the autopsy the surgeon discovered a cause of death quite beyond his power to prevent, control, or even comprehend. The vast change in the progress of operated cases during the past ten years can scarcely be realized. Surgical fever, with all its disastrous variations, is, in practice, rare in Bellevue Hospital. Pus, as an outcome of surgical operations, is a thing of the past. On one occasion last winter, a teacher in one of the medical colleges sent to the wards of Bellevue for a specimen of pus for exhibition to his class, but none was to be found in the four surgical divisions of the hospital, although there was at that time an unusually large number of wounds and operated cases under active treatment. The wound is now dressed with no expectation that fever will rise, or that suppuration will occur, or that the dressings will require renewal on account of the presence of pus. The patient sleeps and eats well from the first, and the surgeon removes the dressing, often only to find the wound united. This remark is true, not only of incised wounds, but equally of wounds of amputation, excision, ligation of arteries, etc.

If now we turn from this review of the several stages of operations in general to particular operations, we find many curious illustrations of the remarkable progress of practical surgery in this hospital. It must be understood that in every operation all of the general precautionary measures already described are scrupulously taken and carried out, and, therefore, only special differences in treatment will be mentioned.

Compound fractures were formerly regarded as proper cases for amputation, if the local injury exceeded a single fracture, with a simple penetration of the soft tissues. And even the simplest cases of compound fracture were reserved for treatment with many misgivings as to the result. The dictum of Hunter that "compound fractures commonly suppurate" was ever the guiding principle in the mind of the surgeon. If, therefore, the wound was extensive, or the bones comminuted, or a joint involved, amputation was the rule. If it were decided to endeavor to save the limb, the only measures adopted were sealing the external wound with some imperfect substance, and placing the limb in a comfortable position. The old fracture-box for the leg and the fenestrated gypsum bandage were the only measures employed. The fracture-box, with its bed of bran or sawdust, was regarded as a remarkable advance in the treatment of compound fractures of the tibia. Placed in the box, with the foot fixed to the foot-board, the wound was covered with bran, and suppuration allowed to go on *ad libitum* and *ad infinitum*. The contrivance had no merit whatever. On the contrary, it greatly aggravated the suppuration by fixing the lower fragment, while it allowed the upper fragment to move freely upon it every time the patient moved. The gypsum splint and bandage had the merit of keeping, or aiming to keep, both fragments at perfect rest. This method of treating compound fractures was a real step in advance, but it did not prevent suppuration in some measure. To-day compound fractures are welcomed to the wards of Bellevue as a class of cases which give the most satisfactory results.

Amputation is not thought of unless arteries and nerves are so far destroyed that death of the extremity must follow. Even when the wound involves a joint, the question of amputation is not more pressing. The treatment pursued is designed—1, to remove from the wound every particle of matter liable to injure the tissues and induce suppuration; 2, to place in fixed apposition all of the tissues composing the wound; 3, to cleanse and disinfect the wound, and protect it from becoming soiled during recovery; 4, to protect the wound from any movement of the parts entering into it while the process of repair is going on. The procedure, so far as concerns the wound, consists in freely exposing the injured parts by incision, removing all effusions of blood, shreds of injured tissue, fragments of bone, and then wiring the bones together so that fractured parts exactly fit each other, next stitching together all cut or torn tissues with prepared catgut thread, as far as they can be brought together; then the final closure of the wound, except where a drainage-tube may be inserted into a cavity of the deep parts; and, finally, the external antiseptic dressings and a light bandage of plaster-of-Paris, and over all a wire-gauze splint for suspension. This treatment of compound fractures is so uniformly successful that the surgeon has none of that care and anxiety after the final dressings which formerly harassed him. If there should be symptoms indicating suppuration, the dressings are at once removed, and the source of the trouble searched out and destroyed.

Amputation wounds rarely, if ever, recovered at Bellevue, except after long-continued suppuration. From the smaller amputations patients recovered in due time, but often greatly enfeebled by the drain of suppuration. The larger amputations were terribly fatal. A resident surgeon once made the statement that a recovery after amputation of the thigh had not occurred in Bellevue Hospital "since the time that the memory of man runneth not to the contrary." Though this remark was not strictly true, it had a painful significance to the surgeons of that period. Suppuration, with its sequelæ, septicæmic, pyæmic, and hectic fevers, was the scourge of the surgical wards. The open method of treatment of amputation wounds, advocated by Dr. James R. Wood, had only the merit of not confining the pus within the wounds, and of thus diminishing somewhat the liabilities of septicæmia and pyæmia. It did not prevent suppuration, the source of all the evil. The treatment consisted in closing the upper part of the wound, and placing the stump in such position that the pus flowed freely out into a vessel placed to receive it. The period of suppuration was undoubtedly diminished by this free exposure of the wound to the air, and the application of balsam of Peru, a favorite remedy with Dr. Wood. The open method was, therefore, a decided improvement upon the old method of closing wounds, but it came far short of the present method, which prevents suppuration altogether, or reduces it to a minimum. Except for the unfavorable conditions incident to the injury, amputations

are now among the most successful operations at Bellevue. Death, by suppuration and its results, does not occur.

Excision of the larger joints was formerly a most doubtful and dangerous operation. The wounds were flooded with pus for months; and if the patient survived, it was only after the most desperate struggle. The specimens of exsected joints in the Wood Museum, honeycombed with channels through which pus flowed out from the deeper parts of the wound, will be lasting witnesses to the destructive pathological processes which the surgeons of a former period could not avert, and which brought to an untimely issue the best-planned operations. In dressing exsection wounds the older surgeons made ample preparation for suppuration. The wound was left open, and the limb was placed in such position as would allow the pus to escape most freely. For months the patient lay in the same position, wasting under the excessive drain, and often having as a dreaded complication extensive bed-sores. Now the surgeon completes the operation by firmly and accurately closing the wound at all points, except where the drainage-tube emerges. This tube is used only for the temporary purposes of relieving the wound of accumulating serous fluid, and is soon removed. As a rule, excision wounds now do not suppurate; union takes place by rapid and healthy granulation.

During the past year or two we have had under observation many cases of excision of the knee-joint, the hip-joint, the elbow-joint, and the ankle-joint, which have been repaired without suppuration. In one instance of an old and destructive inflammation of the ankle-joint the articular ends of the tibia and fibula, the surfaces of the astragalus and os calces, and all of the surrounding tissues had to be thoroughly scraped to remove the dead bone and fungous granulations. When the cavity was prepared for dressing it was enormous. But as all diseased structures seemed to be removed, and the wound appeared everywhere clean, it was dressed for union without suppuration. The wound did heal without other suppuration than a slight amount of pus, which discharged from a small carious surface. The health of the patient began at once to improve, and in due time she was about the ward, on crutches. We may now say of excisions as of amputations, that they are regarded as simple and very safe operations.

The ligation of large arteries was formerly justly estimated as a very serious operation. The common silk ligature, prepared by unwashed hands, was left depending from the wound. To do its work properly it must in due time sever the strangulated artery by the ulcerative process, and then be removed by traction. With the keenest and often most painful anxiety, the surgeon daily watched the wound to note the amount of suppuration, and gently tested the firmness of the ligature. If after the separation of the ligature the suppuration diminished, and finally ceased, the surgeon was happy and boastful of his success. But far too often the suppuration did not diminish, and to the dismay of the surgeon a slight oozing or gush of blood indicated to his practised eye a fatal issue by secondary hemorrhage.

How desperately yet vainly he struggled against fate, by resorting to pressure, position, styptics, etc., the older surgeons can alone realize. The repeated hemorrhages, or uncontrollable outburst, at length placed the case in the category of unsuccessful operations. Now, how completely are all the conditions of the operation changed! It is no longer necessary to divide the artery by the ligature to accomplish our object, and thus endanger life by hemorrhage; but, on the contrary, we seek, while we interrupt the circulation sufficiently to effect our purpose, to strengthen the artery by our operation. The indications now are the opposite of those which before obtained. The ligature now selected is non-irritating, and preferably absorbable, as catgut. When applied, it may, or may not, divide the internal coats of the artery. In either case the wound is completely closed and no suppuration occurs. In the repair the artery enlarges externally at the seat of the operation by nutritive action, while the coagula organizes internally and closes its calibre. Secondary hemorrhage after the ligation of arteries has, therefore, become an incident of the past. The conditions no longer exist which make it possible. Ligation of the common carotid is a familiar operation at Bellevue, and was often performed with great skill by Dr. Wood, who published an elaborate monograph on that subject. I aided him in the examination and collection of cases, and in the preparation of the text, and was impressed with the destructive effects of the ulcerative process which attends the separation of the ligature. Some time since I had occasion to ligate this artery, and applied the catgut ligature, cutting both ends close to the knot, and closing the wound perfectly. Union promptly followed, and nothing farther was seen of the ligature. The patient died at the end of two months of cancer of the mouth and pharynx, and the autopsy revealed an enlargement of the artery at the seat of the ligature to twice its normal size, by a ring of new tissue completely encircling it. On incising the artery at this point, the remains of the ligature were found in this ring, and the coagula had organized and closed its cavity permanently. It was evident that the ligature had greatly strengthened the artery instead of destroying it, as in the old operation.

It follows that, if the major operations are now performed with so much success, the minor operations are correspondingly successful. If we take as an example the treatment of cold abscesses, the improvement is very noticeable. Formerly a cold abscess unconnected with bone, as in the thigh or on the back, were preferably allowed to open themselves. If the surgeon ventured to operate, he usually made a "valvular incision," and allowed part of the contents to flow out, and then closed the wound. This operation was repeated many times. When aspiration was introduced, it was regarded as a great advance. The fear of the surgeon was that air would enter the abscess cavity, and set up active suppuration. I recall a case of large abscess of the back, in a young woman, which, after consultation and much deliberation, Dr. Van Buren ventured to puncture directly. The interest taken in this bold operation was very great, and the progress of the case was watched with much anxiety by the operator. Profuse suppuration followed, and the patient nearly lost her life. Now these abscesses are promptly cured and without suppuration, by opening them freely, and, with the curette, scraping out all the old granulations and diseased tissues; then thoroughly cleansing the cavity with bichloride solutions, and finally pressing the walls gently together with disinfected sponges and bandages, or other antiseptic dressings. The walls of these abscesses, sometimes of enormous size, and many square feet of surface, promptly unite, and often under the first dressings.

And not less important is the change in the treatment of abscesses connected with carious bone. Abscesses in the lumbar and femoral regions, caused by caries of the spine, were once greatly feared at Bellevue.

Billroth's advice was very rigidly followed, viz.: "If the abscess comes from a bone on which an operation is impossible or undesirable, do not meddle with it, but be thankful for every day that it remains closed, and wait quietly until it opens, for thus there will be relatively the least danger." Now these abscesses are immediately opened and kept thoroughly cleansed, together with their sinuses, by bichloride solutions, with a marked diminution, and in some cases, a complete suppression of suppuration. In several instances of both lumbar and femoral abscess from spinal caries incisions have been freely made, the pus evacuated, and by means of the soft rubber catheter gently passed along the sinus, the carious abscess itself has been thoroughly and repeatedly cleansed and disinfected with carbolic or bichloride solutions, followed by rapid diminution and final complete cessation

of suppuration. Meantime, the patients have rapidly recovered from the symptoms of blood-poisoning from which they have been suffering.

At a recent period a method of treating large abscesses and diffused collections of pus in cellular tissue by the introduction of large perforated drainage-tubes was practised. Through these tubes the antiseptic solutions were frequently injected, with a view to irrigate the diseased surfaces and tissues. It was a most unscientific method, and was soon abandoned. Instead of it, we have the present rational practice of carefully opening all collections of pus, cleansing the cavities, removing all granulations and other diseased tissues, and closing the wound permanently. The former method often resulted most disastrously, the present never fails of complete success when properly performed.

Perhaps the most marked illustration of the great improvement in operative surgery in Bellevue may be found in the unvarying success which attends the treatment of simple fracture of the patella by wiring together the fragments. It was eminently fitting that this operation, so novel and startling as to be received with almost universal ridicule by older surgeons, should have first been proposed by the great apostle of antiseptic surgery. By proposing and successfully executing this operation, he expressed his faith in his teachings in form more emphatic and convincing than language could. This procedure does, indeed, embody the very spirit and genius of the surgery of to-day, viz.: Boldness to audacity in the conception of an operation, and conservatism the most absolute in the method and means employed in executing it. And yet this operation is now accepted as legitimate in Bellevue, and is of almost weekly occurrence in one or the other of its surgical divisions. And no operation, so inherently dangerous when performed according to old methods, has ever proved more successful. It has now been performed in more than a score of cases without an unfavorable result.

Though this paper was to be limited to a review of the comparative results of the ordinary surgical practices of Bellevue, formerly and now, with a brief commentary upon the means and methods employed, I cannot pass unnoticed the success which attends the practice of gynecology in that hospital. The surgery of the pelvic organs of the female is based on the same principles as those which govern the general practice of surgery in Bellevue. And the results are equally remarkable.

Septicæmia and pyæmia are almost unknown in the pavilion devoted to this branch of surgery, and recovery after operations is rapid and complete, unless the case is complicated with conditions quite beyond control. The following statistics show the great success of operations in this branch of practice at Bellevue. Dr. Wylie states that since November, 1883, he has performed laparotomy thirty times, chiefly in the Marquand and Sturgis pavilions, with five deaths. Of the cases proving fatal, two were hysterectomies, one for cancer of the uterus and the other for a myoma weighing fifty pounds; two were cases of pelvic abscess, complicated with purulent collections in the fallopian tubes. All of the cases of ovarian cysts recovered.

In reviewing the surgical practice of Bellevue, it is not difficult to determine the essential feature of the present methods as compared with those of the past. Cleanliness is the one great object sought to be attained in all operations. Whatever may be the final conclusion of scientific students as to the cause of putrefaction in wounds, practically it is determined that the surgeon may, with the most absolute certainty, protect an ordinary open wound from suppuration. To effect this object he finds that he has simply to resort to those measures which are known to secure perfect cleanliness of the wound. The agents now relied upon and found efficient are: 1. Soap and water to external parts. 2. Carbolic solutions for the instruments. 3. Bichloride solutions to all surfaces and tissues. 4. Iodoform for external dressings. We may summarize the conditions regarded as essential to success as follows, viz.: *A clean operator; clean assistants; a clean patient; clean instruments; clean dressings.*

COCAINE IN BONE SURGERY.

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To Dr. C. Koller, of Vienna, the civilized world is indebted for the practical suggestions which have led to the widespread use of cocaine as a local anæsthetic. The results already obtained by numerous clinicians and scientific observers, along the line of research originally pointed out by Koller, form a phenomenal chapter in the progress of knowledge regarding relief from pain. But it has been in the application of the drug to mucous membranes that its most brilliant and beneficial effects have been obtained. The results of its hypodermatic use in other localities, though exceedingly gratifying, did not give promise of all that was desired in the way of a local anæsthetic. Thus used its effects were so transient and limited in extent as to require the administration of an excessive amount of the drug, which in turn gave rise to unpleasant constitutional disturbances.

It remained for the genius of Dr. J. Leonard Corning,[1] of New York, to point out and experimentally demonstrate the value of a fundamental departure in the method of its administration, which is to yield by far the most extraordinary practical results yet obtained in its local use as an anæsthetic.

In brief, Dr. Corning's experiments showed "that simple arrest of the circulation in the part, shortly after injecting the anæsthetic, is sufficient to prolong and intensify the anæsthesia." It is clear, therefore, that circulating blood is the active agent in washing the drug out of the tissues into which it has been injected, and thereby shortening the period of anæsthesia.

September 30, 1885, I performed a minor surgical operation in soft tissues, upon a delicate young lady patient in my office, Dr. Corning kindly administering the local anæsthetic according to his method. The profound anæsthesia produced, the small amount of cocaine used, and the great duration of its effects were gratifying surprises to me. For the first time it now seemed probable to me that in the use of cocaine according to this method, I was shortly to realize the practical execution of an idea which I have long cherished, viz., the local anæsthetization of bone and overlying soft tissues.

On the following day (October 1, 1885), having pondered over the subject, I ventured to predict, at my clinic at the New York Post-Graduate Medical School and Hospital, the successful application of this method in bone surgery; I proceeded to detail, on that occasion, the plan which I would try when the first opportunity presented itself. I called attention to the great convenience of the local anæsthetization of bone in the elaboration of the line of work proposed by me in February last.[2]

Assisted by Drs. George R. Elliott and Charles E. Bruce, on Wednesday, October 14, 1885, at the New York Post-Graduate Medical School and Hospital, I proceeded as follows, with a young lady brought to me by Dr. Martin Burke, of this city: She was twenty-seven years of age, and suffered from chronic disease of her elbow-joint of several years' standing. Pus was being discharged from three openings about the joint. The tissues round about were infiltrated with inflammatory

[1] On the Prolongation of the Anæsthetic Effects of the Hydrochlorate of Cocaine when Subcutaneously Injected. An Experimental Study. By J. Leonard Corning, M.D., *vide* New York Medical Journal, September 29, 1885.

[2] The Exploration, Excavation, and Illumination of the Interior of Bones in any Part of the Body. Being Remarks addressed to the Clinical Society of the New York Post-Graduate Medical School and Hospital, February 21, 1885.

products and œdematous. The patient came into the operating-room fully expecting to have ether administered, and when told that a local anæsthetic was to be used, was so apprehensive of pain from the proposed operation, that it was with great difficulty that she could be persuaded to get upon the operating-table. She was weak from hunger and anxiety regarding the operation. An ounce of brandy, in water, was given her.

Having provided myself with a hypodermic syringe, loaded with a five per cent. solution of Merck's cocaine, I began puncturing the skin, injecting at each point about one minim of the solution as near the surface as possible. The area over which these injections were made was an extensive one, covering a segment of the limb from about three and a half inches above the joint to an equal distance below the joint, and involving its entire circumference. It was observed that the diffusion of the anæsthetic drug was very slow, on account of the infiltration of the tissues with inflammatory products, thus interfering with the local circulation, and consequently with the distribution of the drug. About twenty punctures were made, and a like number of minims of the solution, representing a grain of the drug, injected. At the expiration of about fifteen minutes an Esmarch's bandage was applied to the limb, extending from the tips of the fingers to within three and a half inches of the elbow-joint. The object of this was, in the first place, to get as much blood as possible out of the limb prior to beginning the operation, and, in the second place, to relieve the patient of the sensation of engorgement of the limb when subsequently girdled with an elastic band above the joint.

Superficial anæsthesia having been secured, the deeper tissues were penetrated by the needle, and about two minims of the solution injected at each point. The patient no longer winced under the repeated introductions of the needle. The evidences of profound anæsthesia were now manifest to all present, though the patient was still exceedingly apprehensive of pain. The arm was next encircled with a strong elastic band, at a point about four inches above the elbow-joint. With a scalpel a five-and-a-half inch longitudinal incision over the external condyle of the humerus and to the outside of the olecranon process was made, in order to connect two openings from which pus was being discharged. The patient's head being turned, she did not realize that the knife had been used.

Having reached the bone in the neighborhood of the external condyle, the needle of the syringe was introduced under the periosteum in several places and minim injections of the cocaine solution made.

For the purpose of locating the bone lesion and determining its extent, I introduced a drill one-sixteenth of an inch in diameter into the head-piece of my electro-osteotome, closed the circuit, and rapidly penetrated the condyles of the humerus. No pain whatever was experienced by the patient. As the drill passed transversely through the lower end of the bone, I could easily appreciate that it had entered a cavity. Upon withdrawing the drill, the débris lying in its groove was, at my request, immediately submitted to microscopical examination by Dr. George R. Elliott. He reported that the specimen removed was composed of bone spiculæ, fat-droplets, a few red blood-corpuscles, and numerous pus-cells. The lacunæ in the particles of bone removed were variously arranged in comparison with each other, and presented an abnormal appearance. In many of the minute spiculæ of bone the canaliculæ were absent and replaced by fat-droplets. In small areas also the intervening substances was entirely composed of fat-droplets. Fat-droplets were also to be seen in the corpuscles occupying the lacunæ. These findings were regarded as indicating beyond all doubt the existence of a carious process.

In order to explore the site of disease more thoroughly, I introduced a quarter-inch drill into the electro-osteotome and followed the path made by the smaller one through the bone. Absolutely no pain was experienced by the patient in the passage of this large drill. Upon its withdrawal and examination of the cavity by means of a probe it was found that the dissolution of the internal condyle of the humerus was nearly complete. The cavity was cleaned out, the soft tissues on the inner aspect of the arm punctured, and a drainage-tube introduced.

It was still uncertain, however, whether the other bones entering into the formation of the joint were involved in the carious process. To determine this I again made use of a small drill, transversely penetrating the ulna on a level with the coronoid process. Again my patient manifested no discomfort. The débris lodged in the groove of the drill was at once kindly examined microscopically, by Dr. Elliott. He found it to be composed of small bone spiculæ which presented a perfectly healthy appearance. No further exploratory punctures of bone were deemed necessary. A second drainage-tube was introduced through an opening which existed on the lower posterior aspect of the arm and was passed through a counter-opening on the upper and inner aspect of the forearm. The longitudinal incision in the soft parts was closed by interrupted sutures, antiseptic dressings applied, and the patient permitted to go home.

Clinical Department.

LAPAROTOMY FOR ILEUS.

Dr. Henry F. Beam, of Johnstown, Pa., reports the case of a lady, aged forty-eight years, who had been confined to bed for two months suffering from an obscure trouble. She had jaundice, the pulse was small and rapid, the temperature was 101° F., the patient suffered intense pain, and had fallen away forty pounds in weight. For three days she had had occasional attacks of stercoraceous vomiting. Palpitation of the abdomen caused great pain, especially in the right iliac region, where there was a prominence resembling a hernia, beneath which could be felt a hard, round substance. An attempt to move the bowels by enemata was unsuccessful. It was finally determined to operate, and accordingly, chloroform having been administered, an incision two inches in length was made over the point of swelling. The ileum was opened at its point of junction with the cæcum, and the knife immediately struck a hard body. The incision being prolonged, a calculus the size of an English walnut was removed. This was found on section to consist of a small nucleus, the size of a buckshot, surrounded with concentric layers of a material resembling lime, about one-sixteenth of an inch in thickness. The patient made a good recovery.

MILK DIET IN THE ALBUMINURIA OF PREGNANCY.

Dr. L. Swartwout, of Prospect, N. Y., was called to see a patient in the eighth month of pregnancy who was suffering from clear evidences of albuminuria. She was put under suitable treatment, and was restricted to milk diet. The general condition was much improved, and at the expected time the patient was delivered of twins. There were no signs threatening eclampsia during labor, and the woman is now doing well.

COCAINE IN HAY FEVER.

Dr. J. W. Stickler, of Orange, N. J., writes that he has suffered from hay fever for six years, and never succeeded in materially mitigating the severity of the attacks until he used cocaine.

"The symptoms were violent, and repeated sneezing, profuse discharge of a thin watery fluid from the nostrils, itchiness of pharynx, nose, and eyes; headache, impaired appetite, and restlessness at night. While suffering from all these symptoms I sent for a bottle of soluble hypo-

dermic tablets of cocaine, 1.25 grain each, and introduced three into each nostril, keeping them in position, and favoring rapid solution by forcing the alæ against the septum nasi with a handkerchief. As soon as the tablets were dissolved, I snuffed the solution up the nostril in order to secure a thorough application of the drug to the nasal mucous membrane. After using the first six tablets I experienced great relief, and after using fifteen or twenty I was as free from hay fever as I think it possible for anyone to be. I used two bottles full, and then discovered that the disease needed no further treatment, as there was no disposition to sneeze, the nerves of the nasal mucous membrane having become non-susceptible to the various irritants which before had caused so much trouble.

"I wish to say that cocaine tablets are worthless as a remedy for hay fever. I say this because they were recommended as a good 'article,' but careful trial failed to show any cocaine effect."

TREATMENT OF ACUTE EPIDIDYMITIS WITH SUBNITRATE OF BISMUTH.

Dr. J. A. Comingor, Professor of Surgery in the Medical College of Indiana, writes: "In your issue of July 11th a paragraph is published from the *Gazetta Medica di Roma*, setting forth the value of Fuller's-earth in the treatment of acute epididymitis. For several years and in many cases, both in hospital and private practice, I have been treating this affection with subnitrate of bismuth with results nearly identical with those claimed for Fuller's-earth. Under its application, pain is speedily relieved and tenderness and swelling subside in a short time. In fact, its action has been so uniformly beneficial I have not found it necessary to use anything else in ordinary cases. I direct it to be used as follows, to wit.: Bismuth in indefinite quantity, water sufficient to make a paste about the consistence of thick cream, and with a large camel's hair brush paint the scrotum two or three coatings, and repaint at intervals several times daily. To make the directions more definite, take bismuth and water in equal parts, mix, and apply as above. For the purpose of taking the weight off the cord and blood-vessels I order some sort of scrotal suspension; if the ailment is severe enough to bed the patient, a broad strip of adhesive plaster or bandage fastened across or around the thighs, with sufficient padding under the scrotum and contents to elevate above the level of the body to favor the return of blood, will be found serviceable. This method of treatment, in my hands, has been so beneficial and satisfactory I have for several years thought I ought to give it to the profession.

"As to its mode of action I am by no means clear. I have given it a great deal of thought, and have theorized in a variety of ways without being able as yet to reach a satisfactory solution of the question. In the meantime I have observed on making the application on the smooth shining surface, that scrotal corrugation and shrinkage, with alleviation from pain, immediately followed. Now whether these effects are the direct result of the astringent and metallic properties of the agent, or whether they were due to the mere protection given the sensitive surface from the air, I know not. But that it is highly serviceable I verily believe."

Salicylic-Acid Suet in Hyperidrosis.—The reports of the German army-surgeons on experiments recently made with salicylic-acid suet agree in recommending its use as a remedy for extreme sweating of the feet. It is composed of 2 parts of pure salicylic acid to 100 parts of best mutton suet. The Minister of War has, therefore, permitted the introduction of this preparation into the army medical stores, for the benefit of soldiers suffering from sweating of the feet or soreness from riding.

Progress of Medical Science.

Alleged Abortive Treatment of Trichinosis.—Dr. Gottlieb Merkel (*Deutsch. Arch. für klin. Med.*, xxxvi.) reports the case of a man who had eaten sausage containing trichinæ. He was admitted to the hospital twenty hours afterward, and was at once given about ten ounces of compound infusion of senna. Encysted trichinæ were found in the latter portions of the stools. The following day he was given fifteen tablespoonfuls of glycerine, which produced no other unpleasant results than dryness of the mouth and thirst, which was appeased by taking a little seltzer water. Nothing was found in the urine. On the third day the patient left the hospital. He continued well, while those who had eaten the same sausage at the same time were very ill. Glycerine was recommended by Heller ("Ziemssen's Cyclopædia," vol. iii., p. 643), who says that it caused the shrivelling and destruction of the trichinæ, by depriving them of water.

Pneumonia Treated by Intraparenchymatous Injections.—Lépine presents an argument in favor of the local treatment of fibrinous pneumonia by intraparenchymatous injections (*L' Union Médical*). If, says the author, an injection of a few cubic centimetres of a very weak aqueous solution of corrosive sublimate be made into the hepatized lung on the third or fourth day of the disease, in three or four places equidistant a few centimetres from one another, and preferably at the periphery of the lesion, with a view of preventing the extension of the disease, the following phenomena are observed. 1. At the seat of infection an immediate diminution of the crepitant râles and tubular breath-sounds, which are in part replaced by respiratory silence and some larger râles. 2. Sometimes, later, a transient exacerbation of the temperature of the body. 3. The next day a great improvement in the general condition, and notably a precocious defervescence. 4. A resolution which, to judge by the persistence of the harsh breathing, especially in the hepatized parts that have not been treated, takes place very much earlier than would have been the case under ordinary circumstances. As to the relative innocuousness of the intrapulmonary injections in the doses employed (twenty to twenty-five grammes of one in forty thousand solution of bichloride of mercury), when care is taken to keep away from the large vessels at the hilus of the lung, and not to penetrate the lung more than three to four centimetres, M. Lépine urges that he has not lost a single patient, and has not had one accident. The only inconvenience is the pain, but this is not great, and may be still further relieved by adding morphia to the solution. After the introduction of the sharp needle, and before the syringe is fitted on, a few drops of blood are allowed to escape; the injection must not be delayed, or the needle will become plugged. When the needle is inserted into healthy lung, or into tuberculous lung, it does not, as a rule, yield blood. In the healthy lung such injections produce sufficiently defined lesions. Experiments on the lungs of healthy dogs showed that at the site of injection of a rather stronger solution than that mentioned above there was a circumscribed and indurated area, which was made up of blood and congestive œdema. The lesions were less marked with the one in forty thousand solution.

Division of the Supra-orbital Nerve for Traumatic Cephalalgia.—An Amsterdam medical journal relates the case of a young man who received a blow on the forehead, which was followed by a tender swelling over the supra-orbital notch, and by intense general headache, so that he was unable to obtain any sleep at night. Last April Professor Wurgman divided the supra-orbital nerve just above the notch, with a fine tenotome introduced under the skin. This operation relieved the pain almost entirely; the swelling, also, almost disappeared. Anæsthesia was, however, produced over a surface of the extent of a hand's breadth above the orbit, and this has continued unchanged up to the present time.

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A CLINICAL STUDY OF CANCER.

THE publication of the records of the late Dr. Willard Parker on the subject of cancer is of particular interest. They reach back to a period nearly three score years ago, when there was almost an entire absence of definite knowledge respecting the histology of malignant neoplasms. The fact was not then recognized that the infiltration of an organ with carcinomatous elements might be very extensive before any outward manifestations of the disease presented themselves. Also many tumors were considered malignant, *e.g.*, adenoma, which our later researches and observations have lifted out of this category.

This frank statement of the views entertained by the profession half a century ago somewhat weakens, we think, certain conclusions which Dr. Parker drew from his clinical experience, that is, conclusions affecting the distinction of cancer from other malignant growths. In all cases of tumor our problem is primarily to discover its nature. The pathologist relies upon the microscope. Many a surgeon with years of experience relies mainly on the clinical history. In perhaps the majority of cases the conclusions of both are in unison, though reached from different premises. We believe that most men would, in a disputed case at the present day, decide with the pathologist rather than with his opponent. In other words, according to our present knowledge of tumors, any classification of tumors must have, to be accredited with value, an anatomical basis.

Now, in no small number of the three hundred and ninety-seven cases of mammary cancer (?) in the record under discussion, the data given are not sufficient proof to the investigator that the disease really was mammary cancer. No one doubts that such a diagnosis was conscientiously made in every case. All cases seen were not operated upon, however, and many passed out from under observation. Their ultimate fate is unknown. The correctness of some of the diagnoses is at least a debatable point, because the cases were not subjected to the test which we now regard as necessary for confirmation—*i.e.*, microscopical examination.

When we come, however, to that part of the work treating of the causes of cancer, its increasing prevalence, and its geographical and social distribution, we touch upon matter that is really valuable. Of the 397 cases, 253 were in married women, 55 in single, and 89 in widows; of the married and widows 37 had had one child, 240 two or more children, 58 were childless, and of 7 there is no record. The greatest number of cases in any five years, of ages reaching from twenty-five to eighty, was 80 cases between the ages of forty-five and fifty. The left breast alone was involved in 189 cases; the right alone in 174; both in 14; no record, 26. In regard to the relation between tubercle and cancer, Dr. Parker regarded the views of Bennett essentially true. "Taking then the products of simple inflammation (say pus) as a standard, we cannot fail to remark that, while the cell-development of tubercle is below, that of cancer is above the standard; one is deficient in the power of development, the other possesses this power in excess. It seems to me to be probable that tubercle is connected with some derangement of the function of primary, and cancer with some derangement of the function of secondary digestion."

The effective causes of cancer are grouped under four headings: first, luxurious living, and particularly excess in animal food, and facts are adduced showing that the disease has increased in frequency *pari passu* with the march of civilization; second, local irritation of an epithelial surface, particularly in mammary growths; the pressure of a corset against a breast which has suffered from some disorder of lactation; third, mental affliction, as predisposing to a condition of low vitality from nervous depression; fourth, dysmenorrhœa and other uterine irregularities. From these etiological factors some leading principles of treatment are deduced. "There is such a consensus of opinion as to the advisability of early removal of the growth that discussion of this subject would be useless." In order to forestall the development of the disease, we should avoid "unnecessary luxury in the mode of living, especially abstain from food rich in nitrogen. Urge your patient to take sufficient exercise; point out to her the necessity of cleanliness and of avoiding all articles of dress that would induce irritation of the skin. Persuade her to cultivate cheerfulness of disposition and regulate her various functions, particularly that of menstruation."

Dr. Parker does not admit the heredity of the disease: "Looking at the incurable nature of the disease . . . and the time during which it has existed, we could hardly expect a single member of a civilized community to have escaped, were the disease hereditary." He recognizes the fact that there are in some families several cases of cancer, "a fact pointing strongly to some common cause—if not to inheritance, then to habits and modes of living which have been practised by members of the family and which are sufficient to induce the disease."

THE EMPLOYMENT OF THE HIPPURATES OF LIME IN THERAPEUTICS.

M. V. POULET, a French physician, of Plancher-les-Mines, calls attention to the very superior powers of the hippurates of lime and of lithium in the treatment of many disorders of assimilation.

To begin with, M. Poulet announces that the principal acid of the gastric juice is not hydrochloric, as generally taught, but is *hippuric acid.* Like all scientific Frenchmen who believe that they have discovered something, M. Poulet feels no wavering doubts about his results, but states that he has "demonstrated peremptorily" that the

acid principle of the gastric juice is no other than hippuric.

Starting with this new physiological dogma, M. Poulet reasoned that salts formed with the hippurates would be very soluble and efficient. He, therefore, had prepared a hippurate of lime, and has used this extensively for several years (*Gazette hebdom. de Med. et Chir.*, 1884, and *Bulletin Général de Thérapeut.*, August 30, 1885).

The utility of the lime salts in many disorders is admitted. Dr. Poulet, however, contends that the practice of giving them in strongly acid media, as at present is done, works eventual injury. On the other hand, Professor Sansom, of Grignon, shows that phosphate of lime given undissolved passes unchanged through the intestines. The problem, therefore, is to get a lime-salt which will be easily absorbed and yet will do no harm by reason of the excessive acidity of the vehicle. This salt has been found, it is thought, in the hippurate of lime. M. Poulet advises that the rachitic, the scrofulous, the phthisical, persons suffering from osteo-malacia, or from ununited fractures, also infants with imperfect dental development be given hippurate of lime in combination with phosphate of soda. In this way both lime and phosphorus are taken and assimilated.

The hippurate of lime, according to the enthusiastic Dr. Poulet, possesses wonderfully specific properties: 1, Against affections of the urinary passages; 2, against affections of the liver; 3, against certain diseases of the skin and mucous membranes; 4, against a great number of diseases of the stomach and intestines; 5, against diabetes, and 6, against chronic rheumatism and gout.

In subacute cystitis and in lithiasis the hippurate given in the form of a syrup is recommended.

In diseases of the skin dependent upon the tuberculo-scrofulous or upon the neuropathic diathesis the hippurate is believed to work many cures. Poulet cites some instances in which diabetes was much improved by his remedy.

It would be useless to catalogue all the disorders in which the wonderful hippurate is indicated. In the main they are disturbances in assimilation, and are disturbances in which some mineral food is needed by the organism. It is quite possible that M. Poulet has obtained a very digestible mineral preparation, and one which deserves a trial on that ground. His claims for its wonderful efficacy, however, are extravagant and ill-founded.

OX-GALL AS AN ANTIPYRETIC.

Bile in the form of inspissated ox-gall has been alternately highly praised and sharply condemned as a therapeutic agent. Rossbach and Nothnagel state dogmatically that ox-bile when introduced into the stomach neutralizes the acidity of the gastric juice, precipitates the pepsin, and causes digestive disturbances. Other authors have regarded bile as a bitter tonic and laxative. Bonorden claimed that it reduced the action of the heart. Locally he used it with great success in the treatment of hypertrophies. It has also been employed in cancer, diarrhœa, constipation, and especially in conditions in which there is supposed to be a deficiency of biliary secretion.

The adult secretes about three pints of bile daily, of which the solids amount to between four and five ounces. The potent medicinal factors in these solids are probably the alkaline bile salts, which make up more than half the bulk and amount to several ounces daily. Cholesterine, an active poison, is also present in a very small proportion.

The ordinary dose of inspissated bile is from five to thirty grains, the large doses generally causing digestive troubles. It can be readily seen that these amounts are very small compared with the normal amount of daily secretion, even assuming that the bile ever gets unchanged through the stomach. There is, therefore, no very good reason, *à priori*, for supposing ox-gall to have a supplementary value in deficient action of the liver. Its value must be established empirically.

In the *Bulletin of the Clinical Society of the Post-Graduate Medical School*, Dr. George G. Van Schaick makes an ingenious and plausible plea for the use of ox-gall in the treatment of typhoid fever. It is given in doses of 3 ij. to 3 iij. daily. Under its use he believes that the fever is reduced, and the symptoms ameliorated. Three cases are given in illustration, one of which seems to have some value. Ox-gall has been used by other physicians in this city as an antipyretic, and in cases of deficient biliary secretion with, it is claimed, good results.

AMERICAN AND GERMAN METHODS OF VACCINATING.

The question whether one or several pustules should be made in vaccinating is one that is hardly raised at all in this country. Even in the elaborate and careful article upon the "Technics of Vaccination," by Dr. Foster, in "Pepper's System of Medicine," no reference is made to the matter. Yet it is well known that the profession in Germany have very settled convictions that several pustules should be made. The German Commission, which met a year ago at Berlin to discuss and formulate conclusions upon the subject of vaccination, took up, among other things, this point. "In what relation," it was asked, "does the number of vaccinia pustules stand to the protective influence of the vaccination?"

According to Dr. R. Koch, out of 703 small-pox patients, in the Stockwell Hospital, there died, of those having no scars, 47 per cent.; of those having poor scars, 25 per cent.; having one good scar, 5.3 per cent.; having two good scars, 4.1 per cent.; having three good scars, 2.3 per cent.; having four or more scars, 1.1 per cent. From this it would be inferred that a person having four scars on his arm is almost certain, even if he gets small-pox, to go through it safely. Koch himself takes the position, positively, that the protective power of vaccination is in direct relation to the number of vaccinia pustules.

Professor Grossheim cited cases to show that in revaccination the virus "takes" less often on those who have several scars. Similarly, Siegel found that among children presented for revaccination, the successes were the rule if the child had but one scar, and the exception if it had four to eight.

Arnsperger had observed during a small-pox epidemic that the protective influence of the vaccination increased with the number of the scars.

On the other hand, Reissner did not observe much difference. In revaccination of patients with one scar he got 96 per cent. of successes, while of those with two or more scars he got 94.7 per cent. of successes.

There is evidence in English statistics that persons having a number of scars are more surely protected against variola. It is true, however, that in England more than in Germany, these scars represent several successive vaccinations.

The conclusion of the Commission referred to was that two was the minimum number of pustules to be made in a protective vaccination. Professor Eulenberg even urged that the minimum should be three.

Here are conclusions quite opposed to American practice, and they are worthy certainly of attention.

MIRACLE CURES.

THE latest miracle cure, as far as we are aware, has been performed at the shrine of St. Anne de Beaupré, in Canada. A cripple (of what variety not stated) had restored to him here the strength of his limbs, and, after discarding his crutches, left the place indulging in profuse encomiums of the Saint, and decidedly uncomplimentary remarks about the doctors at home who had failed to relieve him. Unfortunately the accounts that reach us from time to time of these miracle cures generally come from regions somewhat removed from any scientific centre, hence a careful investigation of the alleged facts is not undertaken, and does not appear to be encouraged. When we consider, however, that in the town farthest removed from superstition, and the favored home of culture, the "mind cure" is now in apparently fairly successful operation, we are led to inquire whether the saints and transcendentalists have not some common mode of effecting cures. It appears indeed, that the relief experienced is always in direct ratio to the capacity of faith in the individual, and the first and essential quality of being cured is for the unfortunate sufferer actually to believe that he is cured. Persons who have no confidence in the good offices of the Saint, or the benign influence of the mind cure, had better stick to drugs and potions, as otherwise they will perforce experience no amelioration of their ailments. We do not wish to deny that relief is sometimes experienced in a certain class of cases by apparently occult influences, but a perfectly natural explanation can readily be given for these so-called supernatural occurrences. It is solely the power and force of an intense faith that works the cure, and not any outside miraculous influence. It is entirely possible in certain individuals for this kind of faith to cause such a condition of mental exaltation and enthusiasm as to overcome long-seated functional trouble. The body appears to be transformed under the influence of the mind, even to a certain extent to the checking of morbid processes. Exactly the way in which the mind can thus influence bodily functions we do not know, but we have here a satisfactory and natural explanation of these miracle cures. Let us not, then, deny the possibility of some of the cures, although they generally come from ignorant and untrustworthy sources. If in the excitement of battle soldiers may receive painful wounds without being conscious of their existence, why may not a similar state of exaltation, produced in a different way, and with the addition of expectancy, sometimes be sufficient to remove a neuralgia?

If the mind by any means can be raised to a certain pitch, pain, danger, and death itself become trival to the body, History is full of examples of this fact. Cromwell's Ironsides, or Arabian spearmen throwing their lives away on English bayonets, alike exemplify this condition. The utmost self-confidence being engendered, the greatest obstacles appear as trifles to be overcome. Why may not a condition of exhilaration and confidence produced by an intense superstitious faith be at times sufficient to send an impulse through a nerve that for some reason has long ceased to respond to natural stimulation? We must note, however, that these cures take place apparently only in functional and subjective troubles. Modern miracles are never constructive. We have yet to hear of the saint who could restore a leg that had been amputated at the hip-joint; not a few happy individuals, however, with two limbs in such a condition of defective innervation as to preclude walking without crutches, have suddenly had their locomotion completely restored. If carefully followed up, we fear that most of these cures, except in cases of trivial functional derangements, would be found to suffer relapse when the mental confidence that engendered them had somewhat subsided. The most diverse agencies, from a patent liver regulator to a kidney or corn cure, doubtless produce a mild subjective exhilaration as long as the faith holds out, particularly if they are otherwise harmless. At any rate, the quack-medicine business will continue to thrive until the masses are cultivated up to a point above having faith in nostrums. The thirtieth dilution and other infinities of homœopathy can also be placed beside modern miracle cures as far as their method of operating is concerned.

THE PROPOSED NEW NATIONAL MEDICAL ASSOCIATION.

IT is a pleasure as well as a duty to call attention to the suggestions of our learned and conservative contemporary the *New York Medical Journal* regarding the matter of forming a National Association of the Physicians of the United States. We have already urged the necessity and usefulness of such an organization. Our contemporary has gone further and offered a specific plan upon which to base it. This consists in forming a medical association "that shall be few in numbers and so honorable a body that membership in it would carry the highest reward that medical men here would have to hope for."

It is advised that a convention be called of eminent physicians from all parts of the country, and that this convention appoint one-half of the members of the proposed association, the remaining half to be filled up later.

The successful establishment of a society of the character indicated would certainly do much to elevate the status of medicine in the country.

The plan, however, as so far outlined, will at once strike American physicians as having this objection: It is not democratic. The association fills its own vacan-

cies and can very easily become the victim of cliques unless some further and special provisions are made. We should most decidedly advise that the several State, and perhaps certain local or special organizations, have authority to recommend physicians for membership.

Again, there is a strong disinclination among many physicians to take any step that looks like "seceding" from the American Medical Association. The proposed new association need not, however, be looked upon as at all a seceding body, but rather as an adjuvant. Its objects would be almost exclusively scientific, and its work would be in quite a different plane.

The American Association as an educational and medico-political agent may yet do something, but its organization and character make it inherently defective for securing the best scientific work; and it has of late shown such extraordinary and hopeless incapacity in dealing with certain practical questions that many of those who have been its best friends feel the necessity of a radically different organization.

We trust that the subject of establishing such an organization will be widely agitated, and that some definite and feasible plan can be drawn up.

MEDICAL STUDENTS AND THEIR PROFESSORS.

With the commencement of all metropolitan activities after the summer's rest begins anew that of medical instruction. Even in so large a city as New York, where one is almost as much lost and unobserved as if in a wilderness by himself, the medical student makes himself felt and known. There is something in his gait as he hurries from college to clinic; something in the stoop of his shoulders; a great deal in the note-books which he carries under his arm, and not a little in the expression of his eyes, which are opening for the first time on much to which the majority of mankind's are closed—that mark the disciples of Æsculapius.

While the members of the medical profession command the undoubted respect of the community, the medical student is not looked upon with that degree of approbation which the law student, art student, or the scholar in any other department of science wins for himself.

He suggests unpleasantnesses. He dissects; possibly vivisects. sickness and distress are "material" which are profitable to him. He is the one to whom the "ill wind" blows good, and is not yet empowered to make it shift into a favorable direction for others.

It is the time, too, when the professors in the Medical College arouse themselves to renewed activity. Rested by the summer's relief from lecturing they begin with zeal and vigor; as they open their lectures and call the attention of their hearers with the well-known word, "Gentlemen!" there is a crispness and freshness in it which marks the beginning of a new, though oft-repeated, enterprise. It is the old verification that "Hope springs eternal in the human breast," and the professor hopes more than ever this fall to astonish, to enlighten, to edify those who have the supreme privilege of listening to him.

We had it in mind to make a few suggestions with reference to the coming together of these two peculiar classes—students of medicine and professors of medicine—that there might result more of a mutual benefit; but the task is so difficult, one naturally hesitates, though actuated by the feeling that the present system might be improved; that better doctors might be turned out in the springtime if a somewhat different plan were pursued from that of old. The question of the *how* is not easy to settle.

There is an ever increasing tendency to make clearer compilations for students. It saves them time, but it is a questionable benefit which they derive from them. Most lectures are condensations, more or less enlivened with the experience of professors. The students, therefore, need the broadening effect of consulting "authorities" for themselves, and coming in contact with the great minds. It is possible that the students might reap a greater benefit from the methods used in ordinary school teaching rather than those which usually prevail in colleges. The recitation system is based on physiological laws. Repetition of knowledge through speech or sight secures familiarity and consequent recollection.

Professors, lecturers, and clinical instructors strive ever to find the "royal road" for their pupils in pursuit of knowledge, notwithstanding it is ever asserted with proverbial sententiousness, "There is none."

Those who hold up the banner for a higher standard of medical education in this country often become faint-hearted. A desire for patronage, a continuous rivalry batter down high aspirations in this direction. The world, however, moves, and each year sees the requirements for students somewhat in advance of the preceding. Examinations of candidates for the study of medicine would weed out many unfit to undertake it. Upon the faculties of the various colleges rest the duty and responsibility of requiring these, and that they should be more than nominal in character.

The post-graduate schools are doing an excellent work in filling up the deficiencies of graduates from the colleges. The student content with having obtained his degree, and not pressed with an extensive practice, is in a receptive frame of mind and studies the practical workings of medicine to great advantage.

Canadian Opinion on the International Medical Congress.—The new committee met in New York, September 3d, and made some concessions to public opinion, though not so many as we hoped to see. The name of Austin Flint, Sr., will be worth much among the shattered fragments that remain. Many able men in different parts of the Union will assist. We may derive what comfort we can from these considerations; but, after all, the broad, sad fact remains that the cream is principally gone, and we are left to feast on skimmed milk.—*Canadian Practitioner.*

Dr. Flint, Sr., is to be President, and N. S. Davis, General Secretary. These gentlemen are well known both at home and abroad, but many of the Presidents of Sections are scarcely known to the profession of their own country. It seems a pity that the committee had not gone a little further and removed all impediments to a complete success of the coming Congress.—*Canada Lancet.*

News of the Week.

SHORT-SIGHTEDNESS NOT INCREASING. — There has been a great deal of rather dismal writing on the subject of the increase of myopia, especially in Germany. Dr. Emmanuel Roth, of Berlin, in a recent work on heredity, affirms that there is no such increase. He bases this view on investigations in the higher schools of Baden in 1846, and from the tests of the recruits of the district of Heidelberg. Myopia is, according to Dr. Roth, a constitutional defect, which appears about the second period of dentition.

FURTHER RESIGNATIONS FROM THE INTERNATIONAL MEDICAL CONGRESS.—It is announced that Professor H. Newell Martin, of Johns Hopkins University, has declined the vice-presidency of the Section on Physiology, and that Dr. Robert Battey has resigned the presidency of the Section on Gynecology. Dr. Charles Stedman Bull, of this city, writes: "I have *long since* resigned from the council of the Ophthalmological Section of the Ninth International Medical Congress, and decline to serve in that capacity."

THE VERMONT STATE MEDICAL SOCIETY held its seventy-second annual meeting at Montpelier, on October 15th and 16th.

THE KILLING OF DR. BARTON.—Dr. E. Mammen, of Bloomington, Ill., writes: "This sad event did not take place in Bloomington, but at Saybrook, a town some distance east. Bloomington physicians have no reasons to slay each other. Only sweet peace and harmony prevail here."

SUSPENDING ACTION AS TO THE INTERNATIONAL MEDICAL CONGRESS.—We have received some very warm endorsements from active members of the American Medical Association, of our suggestion that some change be made in the present unhappy management of the Congress at the next meeting of the Association. Since, however, the Executive Committee of the Congress have issued a Declaration of Independence, little possibility of doing anything at St. Louis exists.

DR. NELSON B. DE S. SIZER, of Brooklyn, N. Y., writes: "My attention was called last night, for the first time, to a note in THE MEDICAL RECORD of September 12th, from Dr. Lyman, of Chicago, who refers so some statistics published by me in a recent issue of the *Lancet*, which were derived from his work on 'Anæsthetics.' I regret, with him, that there were no more recent ones available on the subject, but I am still engaged in looking up our recent literature on this very interesting topic. Dr. Lyman's name ought most certainly to have been mentioned as their compiler, but the list was taken from some manuscript notes which I made on this question some time last year, and I had entirely forgotten their origin when I wrote the letter referred to."

FOREIGN ADVICE AS TO THE CONGRESS.—The *Medical Times and Gazette* of September 19th says editorially: "In our opinion, the time has now come for the officers of past International Medical Congresses to meet together, and decide that, unless the pledge given at Copenhagen is kept, and all attempts to embroil the Congress in ethical disputes are unconditionally given up, the acceptance of the invitation to meet at Washington should be rescinded, and arrangements made to hold the Congress of 1887 in a country where the medical profession possesses greater solidarity."

FURTHER ENGLISH OPINION ON THE INTERNATIONAL MEDICAL CONGRESS.—The Congress Committee of the American Medical Association met on September 3d last, to "repair the damages" caused by the wholesale refusals to accept office on the part of the eminent physicians elected to this end, and the result has been so much of a makeshift, patchwork arrangement as could be accomplished under the circumstances. Meanwhile, however, resignations come merrily in, and before long the executive of the Congress will comprise an assembly of American practitioners with whose names, save for a very few exceptions, all ranks of the profession in Europe, and the majority of medical men in the States, will first make acquaintance as those of office-bearers under the patronage of the self-elected committee of management. It is thus apparent that all the good advice given to this last-named body has been uttered in vain, and that it is obstinately bent on acquiring for America the unenviable reputation of being the only country in which it has been found impossible to hold an international congress of physicians and surgeons. Such an unfortunate ending to what at the outset seemed to bear promise of eventuating in a brilliant success is greatly to be regretted; and we deeply sympathize with the disgust and chagrin that is naturally felt by the representative heads of the profession in America. The prospects of a Transatlantic Congress must now be regarded as entirely hopeless, and we presume that early steps will be taken to arrange for the 1887 meeting to take place in some country where science reigns superior to party passion and petty jealousy; and the sooner the matter is taken in hand, the better will it be for all parties.—*Medical Press and Circular*

DR. EDWIN M. SNOW, Superintendent of Health of the city of Providence, has, we learn, been invited by the city officials of Montreal to take charge of the small-pox epidemic in that city. He has been tendered the absolute control of the sanitary department of the city for a period of three months.

AN AMERICAN CHOLERA COMMISSION.—The President has issued an executive order directing Dr. E. O. Shakespeare, of Pennsylvania, to proceed, under the direction of the Secretary of State, as the representative of the United States, to Spain and other countries in Europe where cholera exists, and make investigation of the causes, progress, and proper prevention and cure of the disease, in order that a full report may be made to Congress during the next session.

THE NEW HOSPITAL at Gouverneur Slip is now completely built, and ready for patients. It is well built, at a cost of $14,000, and contains thirty beds. It is an emergency hospital for four precincts—the Third, Seventh, Tenth, and Thirteenth—and is a branch of Bellevue. Its visiting surgeon will be Dr. O. J. Ward; the assistant surgeon, Dr. J. D. Odell.

SMALL-POX IN MONTREAL AND THE ATTITUDE OF THE ECCLESIASTICAL AUTHORITIES.—Mgr. Fabre, Bishop of Montreal, has, through the pastors of the various parishes in the diocese, issued a second notice, warning all Catholics that they are "absolutely prohibited" from attending religious services in any place of worship, either when they are afflicted with small-pox, or when they have it in their families, or are in any way directly exposed to the disease and liable to spread it. The Montreal *True Witness* remarks that, under the circumstances mentioned, the presence of any Catholic at church is not merely an optional matter; it is his duty and a matter of obedience to ecclesiastical authority to keep away from all assemblages of the faithful.

A CREMATION FURNACE READY.—The Crematory of the U. S. Cremation Company is reported finished. Forty bodies are awaiting combustion.

Reviews and Notices.

A REFERENCE HANDBOOK OF THE MEDICAL SCIENCES, Embracing the Entire Range of Scientific and Practical Medicine and Allied Science. By various writers. Illustrated by chromo-lithographs and fine wood engravings. Edited by ALBERT H. BUCK, M.D. Vol. I. Imperial octavo, pp. 808. New York: William Wood & Co.

SUBSCRIBERS to this work will exhibit a great deal of curiosity in examining the first volume of the series. The general plan of the work can best be appreciated by so doing, and an estimate can be made as to what may be expected of the others. The undertaking is a huge one, requiring careful selection of subjects, systematic arrangement of them, and judicious apportionment of space to each. The accomplished and painstaking editor, Dr. Buck, has given an earnest of his endeavors in these regards which cannot be gainsaid. Messrs. Wm. Wood & Co., the enterprising publishers, have spared neither expense nor trouble in ensuring the performance of their part of the work. Typographically and artistically the volume is a model of its kind. In many respects the work differs from any heretofore published. It combines the features of a dictionary with the arrangement and elaboration of an exhaustive encyclopædia. Judging from the present volume, the field to be covered will be larger and more comprehensive than any venture of its kind, and promises the practical discussion of a greater variety of topics of interest to the general practitioner than have ever before been compressed in a given number of volumes. It is evidently the aim of the editor to give a comprehensive and condensed view of all the more important topics belonging to the broad domain of medicine. Each of the contributors has worked with those ends in view, and the reader is surprised and delighted to find how much there is in a comparatively small space which he feels he ought to know. Few, indeed, could have arranged and selected the topics with better appreciation of the means to the end. The articles have all varieties in length, but each is complete in itself as giving a bird's-eye view of the subject. Oftentimes volumes are compressed in the discussion of a single theme. Never was condensation so utilized to practical ends. From such a point of view the name, "Reference Handbook," is singularly appropriate.

The details of arrangement can hardly be described to do them justice. They must be studied to be appreciated. This can better be understood when we state that the length of topics varies from that of a few dozen lines to over seventy pages. The relative importance of each decides this matter, but there is a consistency about the whole arrangement which thoroughly harmonizes with the comprehensive design of the editor. We turn over its broad, double-columned, compactly-printed pages, each of which contains three times as much reading matter as the page of a full-sized octavo volume, and glance here and there at the make-up of the body of the work. We obtain a good idea of its true inwardness by perusing the article on abdominal tumors. Under this heading, in an admirably concise manner, are described the etiological and clinical features of abnormal growths connected in turn with the liver, stomach, kidneys, spleen, pancreas, intestine, omentum, bladder, uterus, ovaries, and miscellaneous tumors of the abdominal cavity. All this in a space of ten double-columned pages; and yet no busy practitioner who wishes to study up a case can fail to be thankful to the author for the concise, practical points which are so tersely presented. The student of materia medica seeking information regarding aconite, for instance, finds three fine illustrations respectively of the plant, root, and flower, with the therapeutics, properties, and uses of each. To the pathologist the admirable description of adenoma, with its handsome microscopical illustrations, commends itself. The surgeon will be interested in the article on amputations, comprising thirty pages with numerous illustrations, also with the different subjects discussed under the heads of aneurism, antiseptics, diseases of the rectum, anus, bladder, and breast; these varying from twelve to twenty pages in length. The physiology and pathology of the blood, occupying, with its wood engravings, over thirty pages, contains in such a space all which the general practitioner will need for reference as to literature and practical application as to his treatment of disease. The topic most exhaustively treated is that referring to the development, anatomy, histology, and pathological lesions of the brain. In the space of seventy pages we have condensed an elaborate treatise. Each of the authors of these articles has vied with the other to make the crooked paths straight and to light up the dark places. The entire area of this much-studied field is thus intelligently presented to the student. This is certainly saying a great deal, in view of the numerous futile efforts that are repeatedly made with such an object in view.

In speaking of the excellence of the five hundred and eighty-six wood-cuts, the great majority of which are original, we must not forget to refer to the beautifully-executed full-page chromo lithographic plates, four of which adorn this volume. Nothing equal to them in color and finish has been published in this country. Judging from the first volume, the success of the "Handbook" is assured. We cannot see how it can be improved. The publishers have every reason to be satisfied with their venture, and there can be no doubt that the profession at large will appreciate in a substantial manner their efforts to fulfil a promise the like of which has never before been made.

THE SCIENCE AND ART OF MIDWIFERY. By WILLIAM THOMPSON LUSK, A.M., M.D., Professor of Obstetrics and Diseases of Women and Children in the Bellevue Hospital Medical College, Consulting Physician to the Maternity Hospital, etc. New Edition, revised and enlarged. 8vo, pp. 763. New York: D. Appleton & Co. 1885.

IN the course of a little over three years Prof. Lusk's admirable work has advanced to a second edition. True to his purpose of keeping abreast with the times, and recording the result of advancing experience, he has not only thoroughly revised his book, but has elaborated many parts of it. Some portions have been virtually rewritten. The notable changes made are manifest in the sections on the pathology of labor and the diseases of childbed. Under the latter heading all the advanced ideas regarding the prevention and treatment of the puerperal state are presented. The author of the work has established its reputation as a leading medical authority, and in the

present edition there are abundant evidences of his ability to hold it. The style is terse and perspicuous, while the subject matter is treated from that practical standpoint which is so acceptable to the student and so interesting to the practitioner.

A Text-Book of Medical Chemistry. For Medical and Pharmaceutical Students and Practitioners. By Elias H. Bartley, M.D., Adjunct Professor of Chemistry and Lecturer on Diseases of Children in Long Island College Hospital; Chief Chemist to the Department of Health, City of Brooklyn; Chemist to the New York State Dairy Commission; Inspector New York State Board of Health; President of the American Society of Public Analysis; Member of the American Chemical Society; Member of the American Society for the Advancement of Science. With forty illustrations. Philadelphia: P. Blakiston, Son, & Co. 1885.

Of the seven primary branches of study which the aspirant for medical honors is obliged to pursue, it is safe to say that chemistry is the most neglected. The average student is accustomed to regard his attendance on chemical lectures as a bore and a waste of time, and devotes to this study only so much of his attention as is absolutely necessary to enable him to pass the required examination. This neglect is due in a measure to the belief that a thorough knowledge of chemistry is of little practical benefit to the physician, and partly also to the lack of a really suitable text-book. There are many text-books, and good ones too; but they are for the most part either too large or too small, and the student is forced either to read much that is of little value to him, or to have recourse to little manuals so condensed as to be almost unintelligible. The work before us seems, however, to have avoided both of these evils. It treats at sufficient length of all the elementary facts in physics and chemistry which are necessary for the student to know, and which have a bearing upon medicine, but has little to do with those questions which are related exclusively to chemical science. The book will undoubtedly be popular among students, and there are few practitioners who could read it without learning many facts of practical value to them in their daily work. An appendix, containing tables of the solubility and specific gravity of different chemicals, a list of incompatibles, the analysis of various animal fluids, and a glossary of unusual terms, adds not a little to the value of the book for the general practitioner.

A Text-book of Pharmacology, Therapeutics, and Materia Medica. By T. Lauder Brunton, M.D., D.Sc., F.R.S., Fellow of the Royal College of Physicians; Assistant Physician and Lecturer on Materia Medica at St. Bartholomew's Hospital; Examiner in Materia Medica in the University of London, in the Victoria University, and in the Royal College of Physicians, London; Late Examiner in the University of Edinburgh. Adapted to the United States Pharmacopœia by Francis H. Williams, M.D., Boston, Mass. Philadelphia: Lea Brothers & Co. 1885.

This work will well repay students or practitioners for the time which they may devote to its perusal and study. It is divided into six sections, treating of general pharmacology and therapeutics, general pharmacy, inorganic materia medica, organic materia medica, vegetable materia medica, and the therapeutic agents derived from the animal kingdom. A large part of the book is devoted to a discussion of the general action of drugs upon the economy, and to the methods by which this action is determined. In the sections relating to materia medica the officinal preparations of both the United States and the British Pharmacopœias are given. In addition to a very full table of contents at the beginning of the book there are three copious indexes at the end—one of bibliographical references, one of diseases and their remedies, and a general index of the subject matter. These indexes are most carefully compiled and comprehensive, and add not a little to the value of the work, enabling any one to turn at once to the desired subject without a moment's waste of time. We have no hesitation in recommending this book to the practitioner of medicine and the pharmacist as well as to the student, and feel sure that no one will be disappointed with its contents.

A Complete Pronouncing Medical Dictionary, embracing the Terminology of Medicine and Kindred Sciences, with their Signification, Etymology, and Pronunciation; with an Appendix, comprising an Explanation of the Latin Terms and Phrases occurring in Medicine, Anatomy, Pharmacy, etc., together with the Necessary Directions for writing Latin Prescriptions, etc. By Joseph Thomas, M.D., LL.D. 8vo, pp. 843. Philadelphia: J. B. Lippincott. 1885.

This work will doubtless serve the purpose for which it was intended—viz., to aid the medical student who has little, if any, knowledge of the classics, and who is consequently ignorant of the etymology and pronunciation of words of classical origin. In so far as supplying such wants the work is tolerably complete, but beyond this it cannot pretend to replace or even be abreast of the standard medical dictionaries of the day. The definitions given, although terse, are, as a rule, far from being satisfactory. In fact, there is a notable want of appreciation of the relative importance of different subjects in the space allotted them. Some of minor moment have long explanations attached to them, while others, concerning which additional information would be very desirable, are dismissed by a mere definition. There is no excuse, in a work of this sort, for occupying ten solid pages in a discussion of pathogenesis. Nor is there a good reason for devoting six pages to the cranial nerves. There is a want of system in the make-up of the work which leaves a damaging impression on one accustomed to consult dictionaries. Aside from this, it fulfils its mission in giving aid to the student of medicine or pharmacy who wishes the etymology, definition, translation, or pronunciation of any scientific term. The directions for writing Latin prescriptions are excellent, and deserve the study of every practitioner. The work is well printed.

Diseases of the Tongue. By Henry T. Butlin, F.R.C.S., Assistant Surgeon and Demonstrator of Practical Surgery and Diseases of the Larynx, St. Bartholomew's Hospital, London. 12mo, pp. 451. Philadelphia: Lea Brothers & Co. 1885.

Such compact volumes as the one before us minister to a growing taste for works upon diseases of particular organs. The author has given a concise survey of his subject, and has presented its practical points in a clear and interesting manner. The various diseases which affect the tongue are discussed from clinical, pathological, and surgical points of view, and many curious facts are related in connection with them. Some excellent chromo-lithographic representations are given showing the gross appearances of the syphilitic, tuberculous, epitheliomatous, and inflammatory lesions of the organ. Lupus of the tongue is also shown by such means.

The author discusses quite fully and impartially the different operative procedures for total and partial excisions of the organs, laying down very practical rules for given conditions of disease. He favors Baker's or Whitehead's method for simple removal of whole or part of the tongue, Regnoli's method when the front part of the floor of the mouth is involved, and Kocher's when the disease has invaded the tissues at the base of the organ. The relative mortality is presented, and the different accidents following operations are duly described. The style of the author is terse and lucid, and he gives evidence throughout the work of a practical familiarity with the entire range of his subject.

Lithocystic.—A rolling stone gathers much pus.

Reports of Societies.

THE PRACTITIONERS' SOCIETY OF NEW YORK.

Stated Meeting, October 2, 1885.

THOMAS A. MCBRIDE, M.D., PRESIDENT *pro tem.*

THE subject for discussion was

DIABETES MELLITUS,

and first with reference to *etiology*.

DR. A. B. BALL referred to two cases which had a bearing upon what was known to be the most frequent cause of the disease—namely, some mental strain or anxiety or some injury to the brain. Of course there were many cases of diabetes in which the cause could not be traced.

The first case was that of a gentleman who was a member of the board of trustees of a charitable institution in which a defalcation took place, involving the character of one of his relatives. Up to that time he had been well, and had reached fifty-five years of age. He was placed on a committee appointed to investigate the question of defalcation, and the result was that he was obliged to attend a series of meetings which consumed his time, and involved an unusual amount of mental strain and anxiety. During the second week of the investigation he noticed that he was very thirsty, and was very much depressed mentally. Dr. Ball examined the patient's urine and found that it contained a large quantity of sugar. The case ran a rapid course, and terminated fatally within six months.

The second case was that of a lady who was living separated from her husband under peculiarly distressing circumstances, and not long after the separation she began to exhibit symptoms of diabetes, which ran a course of three years, and the patient died with diabetic coma.

DR. H. F. WALKER could confirm what Dr. Ball had said concerning mental, especially moral, strain by another case, that of a lady who experienced great grief on account of the loss of a favorite daughter, and has a son sick with consumption. She has, besides, probable fatty degeneration of the heart and has an enlarged liver. But the diabetes has appeared since the mental and moral strain from grief was brought on.

Another case, having a similar cause, was that of a lady who was stricken with grief by the death of her husband, and died with diabetic coma after the disease had existed about fourteen months. During the last two years he had had almost an epidemic of diabetes among his own patients; seven cases occurring during the last year; not cases in which the patients came because they were diabetics, but developing in his own practice.

DR. BALL remarked that Seegen had directed special attention to the frequent occurrence of diabetes among the Jews, about twenty-five per cent.

DR. WALKER said that he had seen in his own practice only one Jewish patient with diabetes.

DR. C. L. DANA had a diabetic patient under his care who had been a large eater all her lifetime, and he had understood that the diabetics in India were mostly women who had been overfed. That is, one source of diabetes was in overfeeding with insufficient exercise.

DR. WALKER thought it very difficult to determine whether or not people were large eaters, as many claimed to be small eaters, when it was known that they were not.

DR. C. S. WARD asked Dr. Dana if he thought overfeeding was common in this country?

DR. DANA thought it was not common in this country.

DR. BALL believed that overfeeding of itself would not explain the occurrence of diabetes. It was well known that persons could take large quantities of starch and sugar, if otherwise in good condition, without the appearance of sugar in the urine.

DR. WALKER said that almost all the diabetics he had seen were naturally fond of articles of diet containing large quantities of starch and sugar.

DR. DANA said the point to which he referred was that persons who have diabetes from mental strain, grief, etc., are those who have been in the habit of eating largely all their lifetime.

DR. BALL thought it was not so; at all events, he knew it was not true with regard to some of his patients.

TESTS FOR SUGAR IN THE URINE.

DR. DANA said he had been using Johnson's bed-side test-papers made by Parke, Davis & Co., and they had proved very unsatisfactory. With regard to the bismuth test, it was convenient, but it had seemed to him that it was not very delicate. The test consists in rendering the urine alkaline and putting in a pinch of subnitrate of bismuth, and then boiling the mixture; if sugar was present a black precipitate was thrown down.

DR. MCBRIDE said that he had the pleasure last year of meeting Seegen, of Vienna, who impressed upon him the importance of recognizing sugar in the urine, and since that time he had seen results which had made him say with great confidence that with organic disease of the nervous system the patient would be very much improved when sugar disappeared from the urine. He had repeatedly seen specimens where by the ordinary methods of examining urine, sugar was not detected, whereas by the Seegen method it was readily recognized.

The method consists in filtering urine through *blood charcoal*, then washing the charcoal with distilled water, and examining the third and fourth washings for sugar by means of Fehling's solution. Blood charcoal retains those substances which prevent the precipitation of the copper; not only the uric acid, but the substances with which we are not entirely familiar. The first filtrate sometimes does not show the presence of sugar; but the third washing always will, if it be present.

As corroborative of Seegen's views Lauder Brunton, in an article published in the "St. Bartholomew Hospital Reports, 1880," calls attention to the fact that certain specimens of urine give a purple color with nitric acid, which give no precipitate with copper; but if more water is added, sufficient to overcome the influence of those substances which hold sugar in solution, then the precipitate with copper is obtained. That is what Seegen gets when he washes the charcoal and afterward examines the washings for sugar.

Blood charcoal is difficult to obtain, and animal charcoal *does not* give the same results; the former is essential to the detection of small quantities of sugar.

DR. BALL remarked that it would seem that Seegen ascribed great importance to very minute quantities of sugar in the urine.

DR. MCBRIDE said that he did.

DR. R. F. WEIR remarked that most English authorities said that small quantities of sugar in the urine might be disregarded.

DR. MCBRIDE said that by the ordinary methods, as Fehling's solution, etc., five per cent. of sugar might be overlooked, the sugar being held in solution by certain other substances which the urine contained. He then cited cases of nervous disorders in which marked improvement followed the disappearance of sugar from the urine: for example, a case of left hemiplegia, in which the urine contained only a moderate quantity of sugar, but in which the paralysis disappeared entirely with the disappearance of the sugar from the urine.

DR. WEIR said, *per contra*, there were many cases of nervous affections with temporary glycosuria in which the cure of the former was followed by the disappearance of the latter.

DR. MCBRIDE said certainly, but here is another observer (Seegen) who makes the opposite statement and

has thousands of cases to prove it. Dr. McBride did not wish to convey the idea that when the precautions mentioned were adopted only traces of sugar were found, as it might be present in considerable quantities, and we are yet in the dark as to what substances hold the sugar in solution.

DR. WEIR asked Dr. McBride if by using Fehling's test and detecting one-tenth sugar he had in such specimens resorted to the new German test (Seegen's) and found that it precipitated a much large quantity of sugar.

DR. MCBRIDE replied that, not finding the one-tenth, he resorted to Seegen's method invariably; but he could not speak positively concerning an increased quantity found by the newer test.

With regard to test-papers, he had used the English papers considerably, and had found that they answered very well; but the same objection applied to them that applied to Fehling's solution.

THE MOST FREQUENT COMPLICATIONS NOTICED.

DR. BALL reported a case which illustrated the rapidity with which diabetic coma might appear. A man was brought into St. Luke's Hospital, nearly comatose, and the history, so far as could be obtained then, was that he was a bartender, who had been up all night, and at about five o'clock in the morning he suddenly fell to the floor and became unconscious. There was no evidence of violence, nor of paralysis, and in the absence of these the question of uræmic coma arose. The bladder was found distended with urine, and forty ounces were drawn. The temperature was 97° F. in the rectum, and the pupils dilated. The breathing was peculiar, rapid, with full inspirations, and it seemed to Dr. Ball to be very much like that he had recently seen in a fatal case of diabetic coma. He directed that the urine be tested, not only for albumen, but for sugar; both were found, and the latter in very large quantity. On the following day Dr. Ball obtained from the relatives a clear history of diabetes, from which the man had been suffering for some time. The urine was tested also for acetone, but none was found, nor did the patient's breath have the characteristic odor when it is present in the urine. The case terminated fatally within thirty-six hours after admission, and at the autopsy there was the usual absence of characteristic lesions. The feature of the case especially interesting was the rapid development of the coma.

DR. WALKER said that one of his patients was a man advanced in years, who died of *fibrous phthisis* developed in the course of the diabetes; it was the only case that had terminated in phthisis.

DR. DANA remarked that an active discussion was being carried on, in which it had been claimed that there was no such thing as the bacillus tuberculosis in the phthisis of diabetes, and consequently that it was not tuberculosis.

DR. BALL thought it was the ordinary and generally accepted theory that the phthisis of diabetes is not tubercular phthisis.

DR. WALKER said that in his case there was a history of a pneumonic process, but there was no examination of the sputa.

DIABETES AND LOCOMOTOR ATAXIA.

DR. DANA brought up the subject of the relation between *diabetes and locomotor ataxia.* A patient who had been treated by a competent physician for locomotor ataxia came to him supposing herself to be suffering from that disease. On examining the urine sugar was found, and there were symptoms of diabetes quite well marked; there were also symptoms of locomotor ataxia rather more strikingly marked than those of diabetes; loss of tendon reflex, a peculiar gait with a certain amount of uncertainty in the movements, pains, especially in the legs, etc., but she did not have the symptom of inability to stand with the eyes closed, there was absence of the Argyl-Robinson pupil, the pupils were natural, etc. There had been persistent insomnia, which is rather more characteristic of diabetes than of tabes. Under treatment for locomotor ataxia she was growing worse, but under diabetic treatment she had been improving.

DR. MCBRIDE thought it was not always easy to make a differential diagnosis between diabetes and locomotor ataxia. Since reading an article, some time since, on the patellar reflex in diabetes, he had observed and found its absence and presence about equal, and had also found that it was absent in temporary glycosuria, and that it returned on the disappearance of the sugar from the urine. He then referred to a case of diabetes in which there was diplopia, absence of patellar reflex, presence of fulgurating pains, with some disturbance of equilibrium on standing with the eyes closed, a history of facial paralysis occurring some years before, etc., and he certainly, a few years ago, would have regarded the case as one of locomotor ataxia. But he had not seen a case of diabetes in which the Argyl-Robinson pupil was present, but there had always been a great improvement in the nervous symptoms with the disappearance of sugar from the urine under the use of iodoform and Clemen's solution (arsenite of bromine).

DR. DANA further remarked that his patient also had brief attacks of aphasia, which he thought was characteristic of diabetes.

DR. MCBRIDE had had one patient in whom there was aphasia, which disappeared within a week after the disappearance of sugar from the urine.

TREATMENT.

DR. BALL called attention to one case which showed what a marked effect a small quantity of starchy food could produce on the urine. A lady who had been suffering from diabetes for more than a year came under his care, and at that time was practically taking a diabetic diet, with the exception of thin slices of bread daily, the whole of which weighed about *three ounces;* but she was passing about two thousand grains of sugar daily. On confining her to a strictly diabetic diet, the quantity of sugar diminished rapidly, and at the end of a week the urine contained practically no sugar, according to the usual tests.

DR. BEVERLEY ROBINSON referred to a case in which a proper diet was instituted, and after the use of various drugs during a period of six or eight months, the remedy which gave the best results was the sulphide of calcium. Clemen's solution (bromide of arsenic) had been used without any effect on the quantity of sugar in the urine.

DR. WEIR had had five cases; two rather temporary, and the other three more permanent. Dietetic treatment was introduced, according to Cantani's plan; that is, to starve the patient for twelve or twenty-four hours before beginning the diet for diabetics. This method, with sulphide of calcium, three to five grains a day, had given better results than anything which he had heretofore tried.

DR. BALL said that in a case, now under treatment, the sulphide of calcium had proved more successful than any remedy which had been used.

DR. WEIR further remarked that in *three* of his cases he gave bromide of arsenic (Clemen's solution) without producing any appreciable benefit.

DR. ROBINSON said that in St. Luke's Hospital, since 1872, there had been admitted twenty-two cases of diabetes, twenty males and two females.

DR. DANA had used codeine with good results. He had reduced the pain and diminished the quantity of urine with the oil of gaultheria more than with any other remedy. He thought that Clemen's solution was no more effective than Fowler's solution, and that it was substantially the same preparation of arsenic.

DR. MCBRIDE had been very much pleased with the effects produced by Clemen's solution and iodoform. If

Clemen's solution was the same thing as Fowler's solution, it was much stronger. Iodoform, in three- or four-grain doses, had acted very favorably.

Within the last year he had seen several cases which were interesting because there were certain starchy articles that could be taken without doing harm; for example, potatoes and corn-cakes; and a case had been mentioned to him by Dr. W. M. Carpenter in which the patient could eat buckwheat cakes without producing sugar in the urine.

The best bread for diabetics which he had seen was that made by G. B. Hecker of Cherry Street, who became interested in the preparation of the bread, because of a son who had diabetes.

Dr. Walker had had one diabetic patient who could take buckwheat cakes with impunity.

Dr. Robinson referred to a case in which the patient was obliged to use the glasses for reading which he formerly wore when walking in the streets. There was a large quantity of sugar in his urine, and an oculist had told the patient that the necessity for changing his glasses was due to lessening of the intra-ocular tension.

Dr. Weir mentioned a life insurance company in which it was the custom to accept applicants whose urine contained only a very small quantity of sugar, because experience had shown that the longevity of the persons was as great as that of other people.

The Society then went into executive session.

Correspondence.

OUR LONDON LETTER.

(From our Special Correspondent.)

MESMERISM—A MESMERIC DISPLAY AT MANCHESTER—THE NEW GUIDE TO THE NEW PHARMACOPŒIA—THE LATE JOHN GAY, F.R.C.S. ENGLAND—THE LATE FRANCIS HARRIS, M.B. CANTAB.—MORE DEATHS IN THE PROFESSION—THE LATE DR. M'DOWELL—MR. HENRIQUES—MR. EDWIN CANTON—MR. T. S. WALKER—THE INTRODUCTORIES AT THE LONDON HOSPITALS FOR THE NEW SESSION—VIEWS OF MR. COWELL, DR. FOWLER, PROFESSOR SCHÄFER, MR. PEPPER, AND MR. HOLMES.

London, September 29, 1885.

There is nothing new in mesmerism, and yet it retains the power to set up violent assertion and contradiction. At Manchester a certain professor, of whom, as he hails from your side of the water, we must speak with respect, has been giving a sort of exhibition which has provoked much remark. By some kind of interest the professor secured the use of a hall in Owens College, and great is the outcry against the rulers of that institution for thus sanctioning the pretensions of this pseudo-science.

A certain class of mind is naturally excited by the wonders which are easily produced. Others resent what they regard as an attempt to impose on their common-sense and to take advantage of their easily deceived fellow-creatures. Doctors familiar with the strange truths and falsehoods of hysteria are not very tolerant of the pretensions of mesmerism, electro-biology, *et hoc genus omne.* I remember very well some years ago a lecturer giving a number of rather striking illustrations, in a provincial public hall, of the wonderful power he possessed over some of those present, compelling them to assume attitudes and perform antics which kept the rest of the audience in roars of laughter. A doctor in the town, with whom I was staying, went to the lecture, and at the conclusion proposed to give those who liked to stay an explanation. He entered fairly into it, and when the people seemed a little doubtful told them he could do the same things himself, and although, as he told me, he had never before seen the things done. Do them he did, and with great success, and as he and all the persons operated on were well known in the town, there was no collusion in the matter. He then asked the lecturer to operate on him, but I need not say he was not a good subject, and the electro-biologist could not control any of his actions.

There is in London a small building called the Mesmeric Hospital, and perhaps the American gentleman may get the use of that, now he has stormed the scientific castle of Owens College, where it seems the *medical* students were not so impressible as the rest of the audience.

In a previous letter I gave you some account of the new British Pharmacopœia (which appeared on the 2d of this month), so far as a first examination permitted. Of course it is the subject of common conversation; it being so long since the work was revised. I have now to announce that already one of the London teachers of materia medica has brought out a little volume to assist practitioners and students in digesting the new authoritative standard. I have before me a copy of this little book, entitled "A Guide to the New Pharmacopœia," by Prosser James, M.D., Lecturer on Materia Medica and Therapeutics at the London Hospital. It is a neat little book of over one hundred pages crown 8vo, and gives an epitome of all the changes, then a full account of all the new drugs admitted, their characters, uses, dose, and modes of administration, with a very full therapeutical commentary. The author aims to make it a supplement to the Pharmacopœia, as well as to manuals of materia medica. It is so full that really if bound up with the old Pharmacopœia it would save buying the new.

So it brings down to date, so to say, all the text-books of the materia medica. In these last many of the new drugs are, of course, treated, though more briefly than others, and the words "non-officinal" are generally prefixed. This serves to tell students to pass them by, and the result has been they were little studied. Dr. James' "Guide" can therefore be referred to in the margins in reference to these and also a mark should be put showing where to find other drugs, and thus an old copy of a text-book brought down to date and again made useful. Of course this will not last, as new editions will come out (a new edition of Dr. Whitla's little manual is announced as nearly ready) and new students will buy them; but in the meantime many will be thankful to get for half-a-crown all they need for the present in this little "Guide," which seems very complete, for I have found in it reference to mere trifling changes, showing how minutely it must have been examined.

In my brief summary in a previous letter I ventured to criticise some of the changes made, especially in regard to the strength of active remedies. It is gratifying to find this professor of the subject has similar opinions, and has put in the forefront of his "Guide" a signal as to changes which may be dangerous. He also intersperses the details of chemistry, botany, pharmacy, and so on, not only with a therapeutical commentary, which I suppose must be accepted as authoritative, but with bits of information and, *horribile dictu*, with criticisms on the conscript fathers of the medical council and their new Pharmacopœia which make it lively reading, so far as I have gone. The book only appeared yesterday, but I have read enough to predict it will create some talk, and here and there some of the sarcasms will not be relished.

Many of your readers will remember the name of John Gay with respect, and be familiar with his contributions to surgery. He died on the 15th inst., full of years, and the honor and respect of all who knew him, as a man of high principle, who had worked steadily and well in his profession, and achieved the distinction due to ability conjoined with industry. Your younger readers may imagine from the work he put into his Lettsomian lectures (1867), on varicose disease of the lower extremities, that he was still in his prime, but he was then getting on in life, having been born in 1813. So much the more creditable to be engaged in numerous dissections in order to give his lectures greater value. His last contribution was on hæmorrhoids, and meeting him about that time

I was forcibly struck with the degree to which he had aged since I saw him some years previously.

However, we spent a very pleasant evening together, and I found his mind as active as ever. Some time after, about two years ago, the cloud gathered—cerebral mischief occurred, paralytic symptoms appeared, and, with slow but steady progress, the end came.

Another notable death may be named, Dr. Francis Harris, who was Consulting Physican to St. Bartholomew's Hospital. He was only fifty-five years of age at his death. He had retired early from the active staff of "Bart's," as he had means sufficient without practice—but he had worked so well for his hospital that he was made "Consultant." He was a Cambridge graduate.

LONDON, October 1, 1885.

My last letter concluded with a reference to some recent deaths. Others remind us how the enemy is always among us. Though not a Londoner, Dr. B. G. McDowell was not unknown to some of us. I had had various communications with him. He had achieved such distinction in Dublin that on the death of Dr. Hudson, four years ago, he was made Physician to the Queen in Ireland, to the satisfaction of all his brethren. He was a man of great ability and wide learning. He exemplified the possibility to some men of doing more than one thing well. He had been a hospital surgeon, then became a hospital physician, professor of anatomy, and eventually examiner in medicine. He contributed valuable papers to Todd's "Cyclopædia of Anatomy and Physiology," to the *Medical Press and Circular*, etc. He died on September 15th, after a few days' illness, at the age of sixty-five.

The late Mr. Henriques, who died on September 8th, in the ninetieth year of his age, was a somewhat remarkable figure. He had long retired, but had practised successfully in Jamaica from 1820 to 1825. He underwent lithotrity at seventy-five and enjoyed his after-life. He was the real hero of the story told by Sir A. Cooper of one of his pupils, a lad who came to study from the West Indies, and on his return had the skill and courage to operate on his father for double cataract. Success attended the venture, and the plucky young surgeon had the joy of restoring his parent's sight.

Contrasted with some of the peaceful deaths I have lately reported, how sad is the story of the close of Mr. Canton's life! He was found dead on one of the seats on Hampstead Heath, a bottle lying beside him which had contained prussic acid. He was Consulting Surgeon to Charing Cross Hospital, at which institution he had worked for many years, during which he added to medical literature some valuable contributions. Of these your readers may probably have remembered his book on arcus senilis. I well remember meeting him after its publication, and talking over that and other medical topics, little dreaming that the active mind to which I was then introduced would succumb to the cares of life in so sad a way. He was a popular teacher in his school, and his lessons in surgery and surgical anatomy were well exemplified in his care of patients and his dexterity and skill as an operator. With the most exact knowledge of the anatomy of the part, amounting to an ability to keep before his mental vision a perfect picture in every detail, his confidence never failed. Still he was never reckless—no precaution was ever omitted, and every operation was performed carefully, although with the dexterity of the most accomplished expert. There are young surgeons in London to-day who would do well to imitate Edwin Canton, rather than seek reputation as operators by risks which patients would not run if they were able to judge. Mr. Canton published some valuable illustrations of surgery and pathology, of which those on "rheumatic arthritis" will be specially remembered. He collected and carefully examined many specimens, which he afterward presented to the museum of his hospital and to the College of Surgeons. His literary abilities were also enlisted by non-medical papers, and among others he contributed to *Punch*. Active, zealous, witty, his company was very pleasant, and many will regret that his mind, which had for some time become clouded, should have been so completely unbalanced at last. He had retired from work for six or seven years, and at his decease was in his sixty-eighth year.

Mr. Whitefoord, M.R.C.S., formerly practising at Hammersmith, lately died by his own hand. He had the misfortune to contract blood-poisoning about four years ago, and had suffered much ever since. His mind at length gave way, and going into his consulting-room on the 25th he cut his throat and tried to jump out of the window.

To these sad fatalities may be added one or two reported in the papers as occurring abroad from overdoses of morphia, taken apparently medicinally, by members of the profession.

From Liverpool comes the news of the decease of Mr. Thomas Shadford Walker, who had achieved a position in ophthalmology which will have made his name known to your readers. He was Lecturer in the Medical School, and Surgeon to the Special Hospital in Liverpool. His contributions to the "Medical and Surgical Reports" of the same place were noteworthy, and had received extensive consideration among specialists.

October 2d.

October 1st—the great opening-day of all the English medical schools—has just passed, and the introductory lectures are to-day the one topic of medical gossip. Yesterday there was no address at St. Bartholomew's, which has for some time discontinued the custom, nor at one or two schools which have followed its lead. The London Hospital, now the largest in the kingdom, had also no opening ceremony, the college being in the course of enlargement. At the Westminster the new school buildings were opened, and the introductory lecture duly delivered by Cowell, who gave a short history of the four buildings in which the teaching has been carried on since 1834. He then said a word in favor of lectures, the value of small schools and demonstrations, and passed on to topics of more general interest—the restraint of lunatics, and the need for a real university in this great city. He objected to "watering down" the degrees of the so-called University of London, and would prefer the setting up of one or two new universities to do the work so urgently needed. It is strange how screwing up the standard, so as to compel men to cram for a degree, should blind even practical men to the injury thus inflicted on professional education. The time young men waste in getting up the minutiæ of theory—pure book-work—when they ought to be in the wards of the hospital, may give them success at an examination, but cannot make them either physicians or surgeons.

At the Middlesex Hospital the same subject was touched by Dr. K. Fowler, who though he said the present rage for titles was an evil, held it to be a much greater misfortune that for the sake of getting a degree a student should go to a school where clinical teaching hardly existed and where he had no chance of obtaining resident appointments, and he expressed his hope that the various schemes now before the professional world would result in the institution of a London degree which shall maintain in the purely professional subjects the high standard of the older universities, and for which the other requirements shall not be beyond the reach of men who are fully worthy of the distinction. Dr. Fowler fully recognizes that the relative value of all honors is only to be understood by the initiated, and so long as the mere accident of a man studying in London virtually deprives him of distinctions attainable on easy terms in Ireland or Scotland, the London schools must suffer from the injustice they have so long patiently endured. Dr. Fowler also dealt with the dangers of the present state of our lunacy laws.

At University College Professor E. A. Schäfer, F.R.S., delivered himself of his views on medical education, of

course putting his own subject first, after the manner of the majority. It must be confessed in some things he had much on his side, and it was refreshing to hear him say he should be sorry to confess how little he retained of the dry bones of anatomy with which he had been stuffed before he became a teacher of physiology. Then he fell foul of materia medica—probably as the subject too often abused, or as the one, if eliminated, which would make room for more time for physiology. He forgot, however, that the London teachers of materia medica have largely effected the reform, inasmuch as they have devoted their lectures to therapeutics rather than to botanical or chemical details; and this with the cognizance, and therefore the sufferance, of the examining boards. Mr. Schäfer sketched an excellent course of training, and one which industrious and wealthy men would do well to follow, but one, it is to be feared, quite impracticable. Students as a rule are not rich, if industrious, and they do not want to become investigators in the region of physiological research. They have a limited time in which to become practitioners, not scientists; doctors, not physiologists. It is the forgetfulness of this by examiners which is so much to be deprecated. It may be of vital interest to Mr. Schäfer to know that in the laboratory of Hinab a research was made which is in direct contradiction to the results obtained at Hinauf; but every general practitioners knows that he can afford to wait until the gentlemen of Hinauf are reconciled to those of Hinab, or until some quiet British experimenter, unendowed and unrewarded alike, shall show that neither Hinab nor Hinauf is to be trusted, as both are wrong.

Still every one must feel that Mr. Schäfer has right on his side when he protests against London being unable to get a shilling from the treasury for the endowment of science, while Ireland can get new universities and colleges, Scotland building grants and endowed professorships, and even little Wales a moderate subsidy.

The reason is obvious. Scotland would make it unpleasant to a minister who refused; Ireland has long taken the bribes offered and asked for more; the request of Wales is so very modest, still it is unanimously supported. But England, especially London, has no cohesion. Now and then a lecture like Mr. Schäfer's is delivered, but there is no union among the teachers, no possibility of approaching a ministry in a way to command attention, if not compliance; so statesmen of either party can afford to ignore the demands of doctors or scientists alike.

Mr. Schäfer sees this, and closed his lecture with a demand for unanimity in pressing on Government the duty of making a provision for medical education in London second to that of no city in the world.

At St. Mary's Hospital Mr. Augustus J. Pepper delivered the lecture, and he, too, dilated on education and degrees, his opinions serving to show how impossible it seems to be to attain the unanimity which Professor Schäfer demanded.

Mr. Pepper is a distinguished graduate of the London University, and he has a horror of any proposal to make its degrees more easily attainable. He says that he would "rather it ceased, and be henceforth only a name and an influence." He is willing to see a new teaching university, but not if that be made subservient to the design of rivalling Scotch universities. Mr. Pepper is a young teacher, he already sees some of the difficulties of the London student, and is half conscious of the injustice under which he labors.

But Mr. Pepper mistakes the position. He is not correctly informed as to the object of his university's foundation "by royal charter," and he talks of "the sacrifice to one of the most despicable traits of human character" in a manner to suggest he has not grasped the "exigencies of the situation." What are these "despicable traits?" Simply the demand for justice on behalf of London—that London students shall have the same distinctions open to them as their Scotch and Irish fellows, and that his university shall either do its duty or stand aside, and be nothing but a name. Mr. Pepper is one of those men who would always succeed at an examining board, and he cannot, apparently, see the difference between a passman and a prizeman. With "all his blushing honors thick upon him," it is almost shocking to hear him cry out lest others should get a degree more easily than he has done. He has become an examiner. What will happen if he is suffered to carry out such views, and keep up the pass standard to that of honors? Mr. Pepper then commended general literature to the attention of students. This is the more to be commended, since some people have whispered that he could not have paid much attention to this, or he would never have had time to gather so many medals. Readers of his otherwise excellent "Manual of Pathology" have expressed to me their chagrin that its style was so defective.

At St. George's Hospital, Mr. Timothy Holmes, whose "Manual" and "System of Surgery" are so well known, was the lecturer, and he passed in review the colleges, schools, and hospitals. He admitted the defects of the two royal colleges, but seemed to anticipate that the project for amalgamation might result in a remedy, and that if invigorated by a more popular organization, the influence of a body such as would be produced would be paramount, and we might then look for the redress of many abuses which are now felt in our daily life. The misgiving most will have as to this prospect arises from the doubt whether corporative selfishness can be exorcised from these ancient but corrupt bodies.

OUR CANADA LETTER.

(From our Special Correspondent.)

AN INTERESTING MEETING—PERSONAL ITEMS—NEW HOSPITAL FOR WOMEN—DEATH OF A VETERAN—SMALL-POX IN MONTREAL—A NEW THEORY—OPENING OF CANADIAN SCHOOLS OF MEDICINE.

THE recent meeting of the Canada Medical Association at Chatam is spoken of as one of the most pleasant gatherings since the formation of the Association. The welcome presence of several American visitors, and the interest they manifested in the different discussions in the several sections, gave rather an international character to the assembly.

Dr. Hingston, of Montreal, has the honor of being the first surgeon in Canada to remove the kidney for cystic disease of that organ. The patient, a young lady, made an excellent recovery.

Dr. Charles O'Reilly, the genial Medical Superintendent of Toronto Hospital, has just returned from Europe, where he has been making a tour of inspection through the large hospitals of the continent.

Dr. William Osler, of Philadelphia, formerly of McGill College, Montreal, has been selected to deliver the next course of the Cartwright lectures. Dr. Osler is a Canadian sojourner in the United States, and has many warm admirers in the Dominion, where he is largely known.

The Sisterhood of St. John the Divine, of the Church of England, have opened in the city of Toronto a hospital for women. Although this institution cannot claim great dimensions at present, a grand and useful career is predicted for it. The rules governing the hospital are simple and can without difficulty be complied with. Unlike many other such institutions, the surroundings do not savor of that red-tapery which too often lessens the usefulness of such enterprises.

The death of Dr. John Mackieson, of Charlottetown, P. E. I., is announced. He had been in practice for over seventy years and was the oldest practitioner in Canada. The positions he held during his lifetime indicate the high esteem in which he was held by his fellow-citizens.

The prevalence of small-pox in Montreal has awakened

the local boards of health in every section of the Dominion to somewhat increased diligence. The organization of local boards of health is much more advanced in Ontario than in any of the other provinces. Already there are between two and three hundred boards organized. Each municipality in Ontario is required by an act passed at the last session of the Legisiature to organize a local board of health, and there are six hundred separate municipalities in the province. A medical health officer is generally associated with each Board. The Public Health Act of Ontario may well be copied by the other provinces in Canada. There are at present over eight hundred cases of small-pox in Montreal.

Dr. Buck, of London, Ont., has enunciated the fact that if a patient be not thoroughly under the influence of chloroform, any irritation of the fifth nerve will produce slowing of the heart and final stoppage through the pneumogastric nerve.

The Canadian medical schools are again resuming their work, and as usual the attendance is said to be largely in excess of that of any previous session. The buildings of the Toronto School of Medicine and Trinity School of Medicine have been greatly improved during the vacation, and the museums of each have been made much more attractive. McGill College, Montreal, which enjoys a large endowment, has been much enlarged, and is now said to be better equipped than at any previous time in its illustrious history. The faculty of the Royal College, Kingston, has been greatly strengthened by the addition of new material, although the past few years have witnessed the removal from the teaching staff there of some most excellent men—notably, Dr. M. Lavell, one of the oldest and most esteemed teachers in the province, and who has acquired more than a local fame as a practical gynecologist. He has retired to accept the position of warden of the Provincial Penitentiary, an office to which he will bring the best of qualifications. The Royal College has secured the services of Dr. William H. Henderson as Lecturer on Physiology. This gentleman has devoted a great deal of time and study to his specialty both at home and in Europe, and although a comparatively young man has secured considerable distinction as the reward of his industry. Dr. Sullivan, who has filled the chair in Surgery for many years at Kingston, has been called to the Canadian Senate, in the halls of which legislative body he will in future give vent to the same fervid eloquence that characterized him as a lecturer. No changes of any importance have been made in the faculties of the other Canadian schools.

How Brain-workers should Live.—A letter, written by Mr. Edward Everett Hale, is published in the *Herald of Health*, in which the writer relates the mode of life which he has found by experience to be most conducive to health while engaged in literary work. The letter contains some very practical points, especially upon the necessity of sleep, which are so apt to be ignored. He has found that, in order to procure sleep, the brain must not be excited or worked hard for at least six hours before bedtime, and consequently the greater part of the work must be done in the morning or early afternoon, and none at all in the evening. The latter period is to be spent in light reading or other form of recreation. Another point which the writer has learned well from experience is the necessity of good substantial food and plenty of it. Food and sleep are absolutely necessary for everyone, and above all for those who work with their brains. It is seldom hard work that kills, but irregular work, and work performed at the wrong time. Young men who perform their most severe literary labor in the evening, and there are many of them, are men who are abusing their powers, and who, in nine cases out of ten, will live to regret their imprudence, if they live at all.

New Instruments.

A NEW POST-NASAL CUTTING FORCEPS.

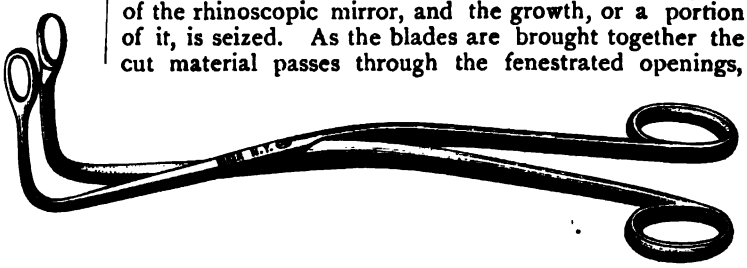
With Illustrative Case of Adenoid Tumor.

By H. HOLBROOK CURTIS, M.D.,

NEW YORK.

Several cases have presented themselves to me in which I found large adenoid growths invading the pharyngeal vault, about which it was difficult to adjust the wire of Jarvis' snare or the thermo-cautery, and for the removal of which no satisfactory cutting forceps have as yet been presented. I append the cut and description of a new instrument, which, in my hands, has proved very satisfactory, and which promises to do away with the difficulties which now present themselves, especially in those cases where the growth is flat and has no constriction at the base, or so large that the greater portion of the pharyngeal vault is occupied.

The forceps are made on the principle of a Thomas' double uterine curette, the sharp edges continuing all around the opening, the blades approximating as the instrument is closed. The forceps are introduced by aid of the rhinoscopic mirror, and the growth, or a portion of it, is seized. As the blades are brought together the cut material passes through the fenestrated openings,



which enables the operator to incorporate a much greater portion of the growth at one cutting than when the ordinary cup forceps are employed. I have had the forceps manufactured at angles of seventy, ninety, and one hundred and twenty degrees for greater convenience in operating, though the seventy degrees forceps are all that is absolutely required. These forceps will remove, piece by piece, with great ease, any adenoid growth in the pharyngeal vault with but the slightest amount of discomfort to the patient. Below is reported a description of the case for which the forceps were devised as being one of special interest.

Miss R——, Brooklyn, came to me on May 1st with history as follows: Patient had been unable to blow her nose for several years; was of necessity a mouth-breather; was growing deaf; eyes were very weak; had difficulty in breathing on slight exercise or going up-stairs; suffered from general malaise; was anæmic; digestion good; face had the characteristic, anxious look, and the contracted upper lip of a patient suffering from nasal stenosis; complexion eczematous; a watery discharge from the nose was constantly troublesome. Examination of the nostrils revealed much hypertrophic stenosis. The pharynx was congested. On saying Ah, the lower border of a pharyngeal growth appeared on either side of the uvula. Rhinoscope examination showed the entire pharyngeal vault to be occluded by a tumor attached to the basilar process, pale in color and very solid in consistency, as determined by palpation. The tumor was so large that it was impossible to pass a wire loop over it through the pharynx, as the anterior portion appeared to intrude upon the mares. The growth had pushed forward the soft palate, leaving abundant space behind the uvula for manipulation. Having procured the forceps made on the pattern of the cut inserted above, and after applying a six per cent. solution of muriate of cocaine, I attacked the growth with the forceps, each time removing pieces as large as a good-sized pea, until I had taken out six or seven such. The pain occasioned was not excessive, but I was obliged to delay operating on account of the hemorrhage, which, however, was slight and

readily controlled by means of a pledget of cotton and a simple astringent. My patient returned every third day, and in thirteen sittings the tumor was entirely removed. I sent pieces of the growth to Dr. Stowell, who reported it a simple adenoma. By means of the forceps I was enabled to trim with great nicety the pharyngeal vault in a more satisfactory manner than I have ever succeeded in doing with the snare. The removal of the nasal hypertrophy and Eustachian catarrh next occupied my attention. This was effected by thermo-cautery and chromic acid applications to the swollen tissues over the inferior turbinated bones, keeping the parts well cleansed and inflating the Eustachian tubes with the vapor of iodine and ether. The patient reported to me on the 20th of August. She was breathing through her nose; had increased much in flesh; was strong, healthy, and in good spirits, being most grateful for the benefit she had received. I consider this mode of extirpation the very best. Firstly, one is conveniently able to remove a small piece of the tumor from a difficult location and examine it for purposes of diagnosis. Disagreeable hemorrhage is prevented. The difficulty of adjusting the thermo-cautery wire or snare loop is overcome; and secondly, the idea of an operation, which in itself is ofttimes horrible to the patient, is done away with. The average person will be much more content to have a few pieces removed at a time than submit to an operation, with its necessary preparations, just as many persons insist on the frequent application of chromic acid to the tonsils instead of allowing amputation.

29 West Thirtieth Street.

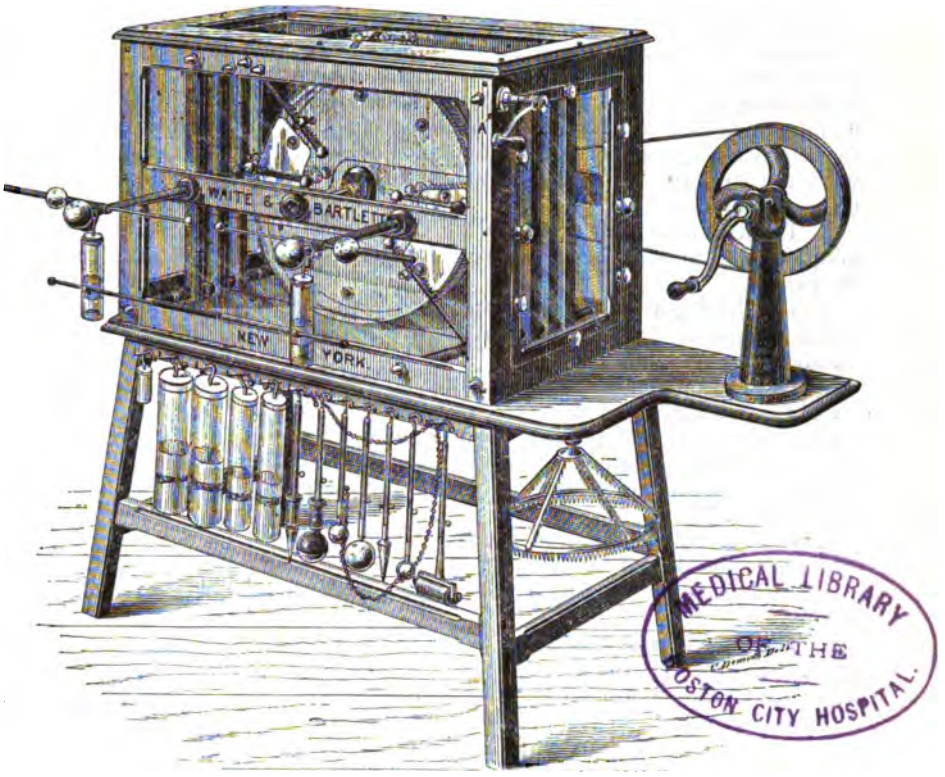
A NEW APPARATUS FOR GENERATING STATIC ELECTRICITY.

By AMBROSE L. RANNEY, M.D.,

NEW YORK.

I would call the attention of the profession to an improved static machine which has been lately devised by me.

It is the result of many months of experimentation, and is the outgrowth of the dissatisfaction which all other devices for generating electricity by friction have afforded myself, as well as others who have employed them. By those who have had experience with static machines it is generally conceded that they are frequently charged with difficulty and give but a feeble spark during damp weather; and that they are particularly unsatisfactory and of little service during the summer months, when such conditions are liable to prevail. It is also conceded that some form of motor is generally required to run a machine of large size, because the hand is soon fatigued in overcoming the friction of the plates upon the rubbers in addition to that produced by the bearings of the axle, and the belt which connects the driving-wheel with the axle. Furthermore, it is now well recognized that plates of large size (16 to 24 inches in diameter) and several of them are absolutely essential to a machine which is intended for medical use. Small single-plate machines do not give sufficient quantity or length of spark to be of any practical benefit as a curative agent. Again, it has been found by experience that building a glass case over a static machine does not thoroughly protect the plates of the instrument from dampness. No cabinetmaker can make joints of wood which will not admit of much moisture when the outside air is impregnated with it; and chloride of calcium, if placed within the case, will not absorb all the dampness that enters and collects upon the plates and metal of the machine.



MEDICAL LIBRARY OF THE BOSTON CITY HOSPITAL.

For a long time, I was in the habit of burning an alcohol lamp of large size within the case of my own machine during damp weather to obviate this serious objection; but to insert and withdraw the lamp the doors of the case had to be opened, and the plates were thus unduly exposed to moisture.

In the second place, I found by experience that all the electrodes of a static machine (being insulated by glass) were liable to be easily broken; and that the poles of the instrument, when by accident exposed to outside violence or a blow, were also liable to cause a breakage of the glass windows in the case of the machine which they perforate in most of the later models.

In some machines, the case is moreover too small for the plates and allows of an escape of more or less of the electricity generated. The first machine which I made upon the present plan had this objection. It would give the operator an occasional shock in consequence of this defect when the hand was used as a motor, and it lost a large percentage of the volume of electricity generated by "grounding" that proportion which jumped to the metal parts of the case.

Without entering further into numerous difficulties which I have had to encounter and overcome, I may summarize the more important improvements made in the machine shown here in the accompaning cut, as follows:

1. The case is so constructed that all of its joints are packed with soft rubber before its screws are tightened. This prevents the entrance of moisture from without and makes the machine a useful one at all seasons of the year.

Soft rubber now constitutes the best packing for steam apparatus, and is also used in hermetically sealing fruit-jars in preference to any known material. All imperfections in the joints of the case are perfectly sealed in this instrument.

The *doors of the case* are so arranged as to be drawn tightly in contact with a frame covered with soft rubber by means of milled screws.

The glass in the case is put into the frames with putty, which is impervious to air.

The poles of the machine perforate the wooden portion of the case instead of the glass windows. They are insulated with hard rubber and the apertures are protected by soft rubber packing placed between hard rubber buttons and the wood. Thus the danger of breakage of the case by accident is decreased without impairing its impermeability to dampness or allowing of leakage of the electricity generated when the machine is in use, while the strength of the case is materially increased by this modification.

2. The axle is so built as to reduce the friction to a minimum and to allow of its being oiled without opening the case.

3. The driving-wheel is very large and rests upon a cast-iron support. This insures both ease of motion and durability.

4. The glass plates of the machine are nine in number. Six of these revolve and three are stationary. The stationary plates are of peculiar shape. The revolving wheels are made of carefully selected glass, so as to be as true as possible and bear evenly upon the rubbers as they revolve.

5. The excitants consist of cat-skin rubbers between the inner plates and metal buttons upon the outer plates, which touch as they revolve upon fixed metal brushes.

6. The collectors have tinsel attachments which aid in gathering the electricity generated.

7. The electrodes are made with handles composed of hard rubber instead of glass. They are therefore less liable to be broken and are as perfectly insulated.

8. Each machine is provided with three pairs of Leyden jars of different sizes. It is arranged also with hooks upon which the electrodes may be hung when not in use.

In conclusion I would say that I have produced with the machine here described, and now in my office (24-inch plates), a spark of eleven inches in length during a muggy day in August, when most static machines would fail to charge. It runs, after a few turns by the hand, for nearly a minute without any power and generates without interruption. Any boy of seven years of age can run it without fatigue for half an hour.

Respecting the uses of static electricity in medicine I would refer the reader to my lectures, lately published in the *New York Medical Journal.*

The machine here described is manufactured by Waite & Bartlett,[1] of this city, who have been industriously occupied for several months in perfecting it under my guidance.

The cost of this machine has been materially reduced from the schedule prices of other makers for similar instruments, rather than increased by the improvements made.

156 Madison Avenue, September 1, 1885.

Number of Physicians in Sweden—Proportion to the Population.—The official report for 1883 gives 445 as the number of physicians, of whom 137 were "province" or county physicians. Further calculation gives for the country at large 1 physician for 7,909 inhabitants. Stockholm, with 122 doctors, has 1 for every 1,594. In some of the larger and sparsely inhabited provinces the disproportion is astounding; thus, Norbotten has 1 to 10,415; Vesterbotten, 1 to 12,262; and Elfsborg, 1 to 16,654!—(From the Swedish newspaper, *Nordstjernan*, published in New York.) The apothecaries shops for the whole country number 1 to 18,924 persons; in Stockholm, 1 to 12,964; in the province of Christianstad, 1 to 28,418!

[1] 202, 204, and 206 East Twenty-third Street.

Army and Navy News.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from October 4, 1885, to October 10, 1885.

Weisel, Daniel, Captain and Assistant Surgeon. To be relieved from duty at Camp at Rock Springs, Wyo. and return to his proper station, Fort Fred Steele, Wyo. S. O. 99, Department of the Platte, October 1, 1885.

Adair, George W., Captain and Assistant Surgeon. Leave of absence extended one month. S. O. 232, A. G. O., October 9, 1885.

Biart, Victor, Captain and Assistant Surgeon. Sick leave of absence further extended six months on surgeon's certificate of disability. S. O. 227, A. G. O., October 3, 1885.

Bushnell, G. E., First Lieutenant and Assistant Surgeon. Granted leave of absence for one month. S. O. 215, Department of the East, October 6, 1885.

Stephenson, William, First Lieutenant and Assistant Surgeon. Relieved from duty at Fort Niobrara, Neb., and ordered for duty at Camp at Rock Springs, Wyo. S. O. 99, Department of the Platte, October 1, 1885.

Chapin, A. R., First Lieutenant and Assistant Surgeon. Leave of absence extended one month. S. O. 230, A. G. O., October 7, 1885.

Official List of Changes in the Medical Corps of the United States Navy for the week ending October 10, 1885.

Bright, George A., Surgeon. To United States ship Brooklyn.

Fitts, Henry B., Assistant Surgeon. To Naval Hospital, New York.

Hall, John H., Passed Assistant Surgeon. Detached from Naval Hospital, Mare Island, Cal., and ordered to the Hartford.

Swan, Robert, Passed Assistant Surgeon. Detached from Naval Hospital, New York, and ordered to the Brooklyn.

Medical Items.

Bromine as a Disinfectant and Insecticide.—It is said that a bottle of bromine left in a closed room all night with the stopper out destroys all infection and insect life. It is far more effectual than the vapor of burning sulphur.

Tapeworm in a Young Infant.—At a recent meeting of the District Medical Society for the County of Hudson, N. J., Dr. S. A. Helfer, of Hoboken, exhibited portions of a tapeworm, in all about five feet in length, removed from a nursing infant five months old.

Eucalyptus Oil in Bronchitis.—Professor H. C. Wood says that the oil of eucalyptus in ten-minim doses (in gelatin capsules) four times daily, has, in his hands, replaced all stimulant expectorants in chronic or obstinate subacute bronchitis.

The Homœopathic Remedy for Diabetes.—Extract of sweet pea.

Another Vacation Chestnut.—One of the most prominent physicians of Indianapolis, on his return from a summer vacation of three weeks, was met by the leading undertaker, who said: "Ah, doctor, so glad to see you safe back; we have missed you so much."—*Atlanta Medical and Surgical Journal.*

The Pulp of the Cimmaroma, a plant found both in the Brazils and in Spain, is said to be valuable as a laxative, ten grains of the alcoholic extract being sufficient to produce an action of the bowels. Mixed with vinegar and water, it is used by the natives of Brazil for erysipelas.

The Medical Record

A Weekly Journal of Medicine and Surgery

Vol. 28, No. 17 NEW YORK, OCTOBER 24, 1885 Whole No. 781

Original Lectures.

LECTURE ON BACTERIOLOGY.

DELIVERED IN THE MEDICAL DEPARTMENT OF THE CITY OF NEW YORK, OCTOBER 14, 1885.

BY ALFRED L. LOOMIS, M.D., LL.D.,

PROFESSOR OF PATHOLOGY AND PRACTICAL MEDICINE, NEW YORK.

GENTLEMEN: Before commencing the history of the so-called infectious diseases, I will invite your attention to a brief consideration of those low forms of life which have become known to our every-day literature as Bacteria. The scientific world is at present devoted to their study, and it is a subject of especial importance to us in commencing our studies of the etiology of the class of diseases which are about to engage our attention.

If bacteria are active elements in the production of pathological conditions, their biology becomes a matter which must concern every progressive medical investigator. If, on the other hand, as many are inclined to believe, they have little or nothing to do with the causation of disease, it equally becomes us as intelligent men to investigate, and if possible determine, their real significance. At different periods in the history of medicine different theories have been advanced, and for a time have held the minds of the profession, to account for the causation of disease, as well as for the peculiar phases which it assumes during its active progress.

There are at present two prominent theories in regard to the infections which produce disease. The first is based upon chemical processes; the second upon the multiplication of living organisms. The chemical theory maintains that after the infectious element has been received into the body it acts as a ferment, and gives rise to certain morbid processes, upon the principle of catalysis. The theory of organisms, or the germ theory, maintains that the infectious elements are living organisms, which, being received into the system, are reproduced indefinitely, and excite morbid processes which are characteristic of certain types of disease. This latter theory so readily explains many of the facts connected with the development and reproduction of infectious diseases that it has been unqualifiedly adopted by a large number of investigators. The proofs of this theory had not, however, advanced beyond the demonstration of the presence of certain forms of bacteria in the pathological changes of a very limited number of infectious diseases, until February, 1882, when Koch announced his discovery of the tubercle bacillus, since which time nearly every disease has its supposed microbe, and the race is indeed swift in which the would-be Kochs press forward with new germs for public favor.

It is my purpose this afternoon to pass in rapid review the subject of Bacteriology, noting first the different genera, their biology, etc., and the modern means employed in their study. In referring to the practical study of our subject, I shall do little more than describe very briefly the processes as employed in our own Laboratory of Biology. Here you will find every means for investigating this subject, and I hope you will avail yourselves of the facilities offered for practical work.

The term *bacteria*, or *microbe*, refers to minute particles of matter, microscopic in size, which belong to the *vegetable* kingdom, where they are known as *fungi*. If we examine a drop of decomposing urine under the microscope, amplifying say four hundred diameters, the field is seen swarming with minute bodies, some mere points, others slightly elongated into rods, all in active motion, rising, falling, oscillating—a ceaseless confusion. If the water be allowed to evaporate, all becomes still, and the slide seems covered with mere dust. Apply a drop of water, and after a short time the little, dried-up granules again show their activity, as though nothing had intervened to disturb their vocation. Similar minute forms are seen in every decomposing fluid, often in the blood and sputum of healthy persons. The air is full of them; the dust of our dwellings abounds with their spores in countless numbers, only awaiting suitable conditions to start into active and rapid reproduction. As I have said, certain forms are found in the blood of healthy persons, while other forms are found in the blood of disease.

All these different organisms have become familiar to us under the generic term *bacteria*, which is a very unfortunate use of the term, as it really applies to only a single class of *fungi*. Cohn, whose classification I think is the simplest and the best, calls them *schisomycetes*, and makes the following classification:

CLASSIFICATION OF SCHIZOMYCETES (BACTERIA).—1. *Sphero-bacteria*, or micrococci. 2. *Micro-bacteria*, or bacteria. 3. *Desmo-bacteria*, or bacilli. 4. *Spiro-bacteria*, or spirillæ, spirochetæ.

I will now briefly refer to the more important features of each of these classes.

First, of *sphero-bacteria*, or micrococci. This is the simplest of the fungi, and appears as a minute organism of spherical form. It multiplies by fission—a single coccus forming two—these two producing four, and so on. They present a variety of appearances under the microscope, as you will observe in Fig. 1. From single isolated specimens (which under the highest magnifying powers present nothing beyond minute points), you will observe them in pairs, again in fours, or in clusters of hundreds—yes, thousands (forming zoöglœa), and still adhering together, forming chains.

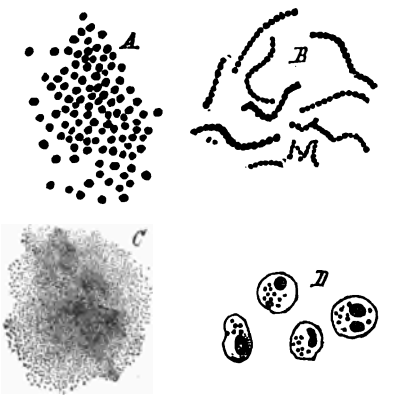


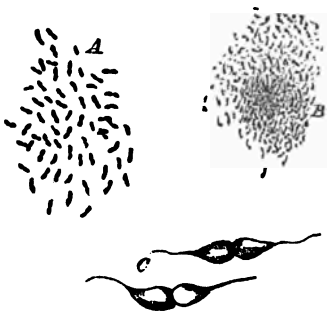
FIG. 1.—Sphero-bacteria (Micrococci). *A*, Micrococcus vaccinæ (× 1,000); *B*, same in chains (× 650); *C*, a zoöglœa mass; *D*, M. gonorrhœa (× 600).

When a given specimen is about to divide, it is seen to elongate slightly, then a constriction is formed, which deepens until complete fission ensues. Micrococci possess no visible structure. They consist of a minute droplet of protoplasm (myco-protein), surrounded by a delicate cell-membrane; certain forms are embedded in a capsule. (Diameter, .0008 to .001 millimetre.)

These little organisms, when observed in a fluid like blood, sputum, etc., are found to present very active movements, although provided with no organs of locomotion. This Brownian motion is possessed by almost every minute particle of matter, organic and inorganic, and is not due to any inherent power of the individual.

Micrococci are almost omnipresent. They are always found in millions where moist organic matter is undergoing decomposition. They are associated with the processes of fermentation, in fact, they are essential to it. The souring of milk succeeds the multiplication of these germs. They abound in the air, the earth, the water. Certain varieties are pigmented, and you will observe colonies of these *chromogenic* cocci multiplying in our laboratory upon slices of boiled potato, egg, etc., presenting all the colors of the rainbow. Fortunately, all of these germs are not associated with, or rather are not the cause of disease. Certain species, however (termed *pathogenic*), are always associated with certain diseased conditions.

The second plate which I present (Fig. 2), illustrates the microscopical appearance of the *Bacterium termo*, *micro-bacteria*. You observe that they are slightly elongated, and inasmuch as they multiply by division they frequently appear coupled together, linked in pairs, and in chains. They are generally found in putrifying liquids, especially infusions of vegetable matter. They possess mobility to a remarkable degree. Observing a field of the bacterium termo under the microscope they may be seen actively engaged in turning, twisting, or



IG. 2.—Micro-bacteria (Bacteria). *A*, Bacterium termo; *B*, same in zoöglœa mass (× 600); *C*, same (× 2,100) showing flagella.

oscillating—a delicate tail-like filament, or *flagellum*, has been demonstrated as attached to one or both extremities. This is too minute to be generally resolved, even if it is a common appendage.

Micro-bacteria are of various kinds, and although many are pathogenic, the *bacterium septicæmiæ* of Koch produces the most rapidly fatal results when introduced into the circulation of a living being. Other examples of this class, resembling in every respect, as far as their microscopic features are concerned, the septicæmic bacterium, are frequently found in the blood of perfectly healthy persons.

Desmo-bacteria (or bacilli) are rod-like bacteria, occurring of various lengths and of different thickness. On this account authors have introduced the term *vibrio*, as applied to the long, slender, curved, and thread-like bacillus; bacilli are not infrequently provided with a flagellum, which assists in locomotion. The different species of bacilli differ greatly in their microscopic appearance; while some are rounded at their extremities, others are square cut, and others pointed. Bacilli may develop by division, but their usual mode of development is by spores. You will observe in Fig. 3 the bacillus of tuberculosis and anthrax. Notice at intervals the dots, which represent the spores from which, as the rods break up, future bacilli are developed.

Spiro-bacteria. In Fig. 4, I present to you drawings of two different forms of spiro-bacteria—the spirilla and the spirochetæ. The former have short, open spirals; the latter long and closely wound spirals. The *spirillum volutans* is often found in drinking-water and, in common with some other specimens of this class, is provided with flagella, sometimes at both extremities, which furnish the means of their rapid locomotion. The spiro-bacteria multiply by spores, although little is at present known of their life-history. They not infrequently are attached together at their extremities, forming zigzag chains.

In this brief description of the principal varieties of bacteria (classified according to their form), we have

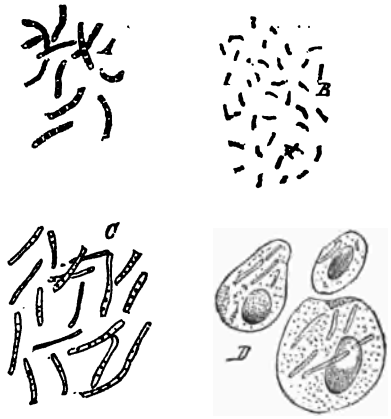


FIG. 3.—Desmo-bacteria (Bacilli). *A*, Bacillus tuberculosis (× 2,000); *B*, the same (× 350); *C*, Bacillus anthracis, from the blood in splenic fever (× 750); *D*, Bacillus leprœ, showing bacilli in cells isolated from tuberculous nodules by teasing (× 1,000).

seen that they differ greatly in appearance, from the minute dot of the micrococcus and the elongated dot of the bacterium proper, to the elongated rod or cylinder of the bacillus and the long spirals of spiro-bacteria. It is unfortunate that these minute forms of life are not sufficiently constant in habit to always attach themselves to one or the other of these genera. The micrococcus has a habit of elongating until it is impossible to recognize him except as a bacterium; while bacilli break up until their particles exactly resemble the micrococci. Again, there are other forms which cannot be classified with the above; but I will not at present burden you with the complicated forms of *fungi* which are found existing as moulds, yeast-plants, etc., but will pass to the consideration of the *biology of bacteria*.

Bacteria cannot exist without water. Certain forms require oxygen, while others again thrive equally well without it; some thrive in solutions of simple salts, while others fastidiously object to anything less than broths of albuminoid material.

The most important element in the successful multiplication and growth of fungi seems to be the maintenance of certain temperatures. The temperature of the hu-

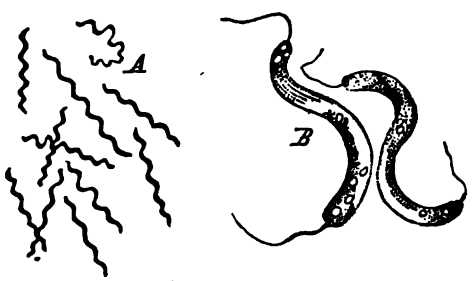


FIG. 4.—Spiro-bacteria. *A*, Spirochæta Obermeieri, from blood in recurrent fever (× 1,000); *B*, Spirillum undula, from bog-water, showing flagella (× 3,000). After Dallinger.

man body is necessary for certain pathogenic bacteria, while ordinary temperatures serve for many varieties. Still there are points above or below which all cease to live. Immersion in boiling water rapidly destroys most forms, while prolonged boiling is fatal to all. It appears that while many forms of fully developed germs are easily destroyed by a temperature much less than 212° F., their spores are capable of withstanding high temperature with less risk of injury. The peculiar behavior of

each species under observation, must, as regards the effect of heat, be carefully determined, ascertaining the most favorable temperature for their development, and the degree of heat necessary for their destruction. If the conditions of temperature, media, etc., are observed carefully they will develop with extreme rapidity.

In the study of the relation of a given bacterium to a certain disease, it becomes necessary to attend carefully to three different operations.

First, the organism supposed to cause the disease must be found and isolated.

Second, it must be cultivated through several generations in order that absolute purity may be secured.

Lastly, the germ must be again introduced into a healthy living being.

If the preceding steps be successfully carried out, and the original disease be communicated by inoculation, and the germs be again found in the diseased body—we have no alternative—we must conclude that we have ascertained the cause of the disease. The importance of being familiar with the etiology of disease before we can expect to combat it with any well-grounded hope of success is evident.

The three steps I have alluded to are surrounded with difficulties, and if you will follow me I will endeavor to indicate some of them.

Let us suppose, for example, that we wish to repeat the work of Koch with the bacillus of tubercle. Let me premise by saying that it is believed that certain little rod-like forms are invariably found associated with tubercle. If the sputum of a phthisical patient be submitted to the skilled microscopist he is always able to demonstrate the bacilli. This goes for very little. Because bacilli are found in phthisis it is no more certain that they are the cause of phthisis than is it certain that cheese-mites are the cause of cheese. But if with these bacilli we can inoculate a person, and thus produce tuberculosis, we have the chain complete.

Well, supposing we were to inject some sputum from a phthisical person into the blood of a healthy person, and then boldly announce to the world that you have demonstrated the relation of cause and effect between the bacilli and phthisis. You would start such an uproar of objection as would speedily convince you that there was much work yet for you in the domain of bacteriology.

Among these objections would appear this, and very properly too: "You have injected into the blood of your unfortunate patient pus, morphological elements, and, perhaps, half a dozen other forms of bacteria with the sputum, any one of which are just as likely to produce the lesion as the bacillus you have selected."

So you must begin again. You must first isolate your bacillus.

It is a fortunate fact in the biology of bacteria that nearly every specimen has a peculiar mode of growth. If I were to take a glass plate, one side of which is coated with a thick solution of hot, peptonized gelatine, and allow the latter to cool, the gelatinous matter will become solid. If, now, with a wire dipped in some tuberculous matter, I draw a line along the gelatine, I have deposited at intervals along this line specimens of T. bacilli. If this plate be now kept at a proper temperature, after a few days, wherever the bacilli have been caught, a grayish spot will appear, which, easily seen with the naked eye, gradually spreads and becomes larger. These spots are colonies containing thousands of T. bacilli. It is not probable, however, that we have been fortunate enough to have avoided depositing other germs along the line. If putrefactive bacteria are present, they will liquefy the gelatine. Various appearances are thus afforded, even to the naked eye, according to the particular bacterium present, and we soon become familiar with the characteristics of particular germs. Cultures of bacteria are usually made in test-tubes containing peptonized gelatine, coagulated blood-serum, etc.

Let us return to our gelatine-plate. We find a spot which answers the description of a colony of tubercle bacilli. We now take a minute particle from this colony on a wire and convey it to the surface of some hardened blood-serum in a test-tube. We plug the tube so that no air-germs may drop in, and place it in an incubator at the proper temperature. After several days, if no contamination be present, a colony of bacilli will appear around the spot where we sowed the spores. Let us repeat the process: take a particle from this colony and transfer to another tube; this is our second culture. This must be repeated until we are satisfied that we have secured a "pure culture." If this be carried to the twenty-fifth generation, we may be assured that there remains no pus, no *ptomains*, nothing but the desired bacilli. It is a proper material now for *inoculation*.

Practically, many precautions have to be thrown around every step of our work. You can see that spores might accidentally be attached to our tubes. They must be *sterilized*. This is accomplished by exposing them to prolonged high temperature in an oven. Similar precautions are taken with the plug of cotton used to stop the mouth of the tube. The wire must be heated to redness always just before using. We are in constant danger of contamination, and sometimes fail even with the utmost care. Fortunately, we can determine whether everything is as it should be. If a tube shows signs of admixture, it is discarded at once and another trial made.

Negeli has proposed a "dilution method" for obtaining "pure cultures." He had some urine containing large *micrococci* which he wished to cultivate. The urine also contained numerous *bacilli*. A single drop of the urine, supposed to contain five hundred thousand bacteria, was mixed with about two ounces of pure water and shaken thoroughly. This dilutes the urine a thousand times. One drop of this is now mixed with another two ounces of water, and a millionth dilution was obtained, in which every drop must average to contain one bacterium. He inoculated ten tubes of gelatine each with one drop of this dilution. After incubation it appeared that four tubes remained sterile, one contained bacilli, and five the *desired cocci*.

You will find in our Biological Laboratory the modern appliances for sterilizing the fluids, vessels, etc., as well as several incubating ovens, the temperature of which may be maintained at a given point for months. The large incubator constructed by Dr. Miller, will accommodate several thousand culture-tubes at once.

We have, then, finished the second step in our work, that is, we have obtained our bacilli pure, and have cultivated them through several generations, and it is improbable that our culture-tubes contain any contamination from the original source of our supply of bacteria.

It remains for us to complete the work, that is, we must now reproduce the disease by inoculation with our pure culture. Now we are forced to resort to the lower animals for experiment. No one, as yet, has sufficient admiration for science to inoculate himself. Hence it is impossible to complete a perfect chain of evidence. Objection can be reasonably made to the employment of mice and guinea-pigs. It is just possible that deductions from such experiments would not hold with human beings. But there seems to be no alternative. We proceed to inoculate several guinea-pigs with our pure culture of tubercle bacilli. The following are the results as first obtained by Koch, and which are almost identical with the phenomena obtained in our own work. The utmost care having been taken to avoid contamination of our virus (by heating the inoculating needle red-hot just before using), a puncture is made through the skin and a few drops of pure culture injected into the loose areolar tissue of the neck.

"The wound generally closes on the second day. The inguinal and axillary lymphatics become swollen on the eighth day. From this time the animals lose weight

rapidly, and die in four or five weeks from the time of inoculation. In the spleen and liver the characteristic tubercular changes are found." Koch's results led him to believe that "the bacilli occurring in tuberculous substances were not merely the attendants of tuberculous processes but the cause of them, and that *the bacilli actually represented the true tubercle-virus.*"

I have spoken thus of the tubercle-bacilli in order to give you a general notion of the processes employed, and the precautions necessary in this work. The steps are nearly the same with the bacteria found in other diseases. The same extraordinary precautions are always necessary to avoid contamination. Some thrive in one fluid, some in another, some at ordinary temperatures, some at the body-heat.

From my remarks thus far you may have inferred that it is a very easy matter to find the bacterium of any particular disease, but I must correct this error. Let us place a particle from the discharges of a cholera patient under the microscope. Among the objects filling the field are numerous little curved rods—the comma bacilli. But if you now substitute a drop of fresh normal saliva for the choleraic discharge, you will find little curved rods in every respect like the commas of cholera. I may as well say at once that the microscope alone will not enable us to determine whether a given bacterium is pathogenic or not. You have already seen that each species possess peculiarities of growth in our culture-tubes.

Bacteria also frequently afford peculiar chemical reactions. For example, nitric acid will discharge the color from all bacilli, artificially dyed with anilin, *except those of tubercle and anthrax.* One species is stained readily with one dye, that leaves another unaltered. Thus we are enabled in the laboratory to determine whether the bacilli found in sputum, for example, are from tubercle or are the bacteria of decomposition.

From what I have said of the tubercle bacillus it would seem as thoroughly demonstrated that it was the cause of tubercle in these animals. But we must walk cautiously here. These are not human beings; who knows that like results would follow their inoculation? The animals used by Koch are animals very subject to tubercle.

We must, from the very nature of our environment, be constantly inhaling these germs as we pass through the wards of our hospitals—yes, they are floating in the air of our streets and dwellings. It becomes necessary for us to inquire, If bacteria cause disease, in *what manner do they produce it?* Ziegler says: "The healthy organism is always beset with a multitude of non-pathogenous bacteria. They occupy the natural cavities, especially the alimentary canal. They feed on the substances lying in their neighborhood, whether brought into the body, or secreted by the tissues. In so doing they set up chemical changes in these substances. While the organs are acting normally these fungi work no mischief. The products of decomposition thus set up are harmless, or are conveyed out of the body before they begin to be active." If bacteria develop to an inordinate extent, if the contents of organs are not frequently discharged, fermentation processes may be set up, which result in disease. Bacteria must always multiply and exist at the expense of the body which they infest, and the more weakened the vital forces become the more favorable is the soil for their development.

Septicæmia is caused by the absorption of the products of putrefaction induced by bacteria. Before bacteria can multiply inside or outside the body they must find a congenial soil. The so-called cholera bacillus must gain access to the intestinal tract before it finds conditions suitable to colonization. They do not seem to multiply in the stomach or in the blood, but once injected into the duodenum they develop with astonishing rapidity. The delicate epithelial cells of the villi become swollen, soften, and break down, exposing the mucosa.

But it becomes us to proceed in this matter with great caution. We must avail ourselves of every means of research, and patiently endeavor to ascertain what of pure gold there is in this new field of study. The subject is a fascinating one, and it seems to settle, or at least, open the way of settling, so many hitherto difficult questions in pathology, that it has been accepted by many without such a basis of facts as every careful investigator should demand. Another very extensive and important field opened by bacteriology is that of the prevention of disease by inoculation of attenuated or modified bacterial matter.

Pasteur, experimenting with the bacilli of anthrax, found by exposing the microbes to a certain temperature higher than that most favorable for their development, they lost their virulence to such an extent that he could vaccinate sheep without danger; and that animals so vaccinated were, for a given time, rendered incapable of contracting anthrax. Various opinions are held regarding the value of these experiments at present. You are all familiar with the newspaper accounts, at least, of Dr. Ferrán's experiments with the cholera inoculation. We are not at the present time able to speak with any degree of positiveness regarding the value of this work.

What is to be the future of the very interesting and fascinating studies to which I have this afternoon briefly directed your attention, no one as yet can determine. It is in the hands of ardent students, who are everywhere carrying out new investigations, and I shall not burden you with my own opinions in regard to it. The great question at present to be settled is, whether we are about discovering the ultimate cause of many hitherto obscure pathological states, or whether these microbes are only bacteria of health taking advantage of diminished vitality to develop with increased rapidity—*whether they are the cause or the scavengers of disease.*

Original Articles.

COMPRESSION MYELITIS OF POTT'S DISEASE SUCCESSFULLY TREATED BY LARGE DOSES OF POTASSIUM IODIDE.[1]

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THE paper this evening is presented with the object of recording a few cases of interest from a therapeutical standpoint. If any claims to originality are expressed, I beg that the claims will be freely criticised, and, if unfounded, corrected.

I am not aware that anyone has employed the drug in the doses that I have employed it in this disease, and with the same success. I confess, at the same time, that I have not searched the literature of the subject with that diligence that a paper laying claim to originality demands, and my apology is simply lack of time.

A few years ago, 1878, I had the honor of presenting before the Neurological Society a paper on "The Paralyses of Pott's Disease," being a clinical study of fifty-eight cases, and at that time I made a very careful search of the literature, failing to find any mention of potassium iodide in large doses as an efficient remedy. From a study of my own cases, and from the writings of Michaud,[2] I arrived at what I still believe to be the correct pathology of the compression myelitis of Pott's disease. Let me quote from my paper, as I do not believe I can do better now, seven years later:

"A study of the symptoms peculiar to lesions of the different tissues in the neighborhood of the diseased vertebræ, aided by a knowledge of the facts taught by neurophysiology, enables one to state with a great degree of precision the pathology in individual cases. In modern

[1] Read before the Section on Neurology of the New York Academy of Medicine, October 9, 1885.

[2] Sur la Meningite et la Myelite dans le Mal Vertebral. Paris, 1871.

text-books we have chapters on peripachymeningitis, on pachymeningitis, on meningitis and the inflammations of all such organic structures. The subject of neuralgia, and of pseudo-neuralgia, is constantly before the profession in many entertaining forms. The theory of the French school of pathologists is well fortified by the facts collected, and when one is satisfied as to the mode of reproduction of the impaired nerve elements, it (the theory) becomes easy of acceptation.

"Let me state as clearly as I can the theory. First there is the caseous osteitis of the bodies of the vertebræ, attacking by contiguity the perimeningeal areolar tissue, the vertebral ligaments, of course, becoming involved in the morbid process. Then the dura mater speedily partakes of the pathological changes—a "pachymeningite externe" being the result. This change is characterized by vegetations on its external surface and consecutive caseous alterations, which blend with the caseous detritus in the bone and thickening of the dura just named, from a chronic inflammatory process. The cord becomes compressed, a focus of myelitis is, as a consequence, induced, and from this focus there is a transverse myelitis followed by a fasciculated sclerosis ascending through the posterior columns, and descending through the lateral and anterior.

"This caseous external pachymeningitis in Pott's disease as a constant factor readily explains many of the symptoms peculiar to peripheral neuralgias and paralyses. Michaud believes that in all cases of angular deformity *myelitis* is the rule, and states that it may exist without giving immediate rise to paraplegia, claiming to have proven that myelitis is early in its development, and may even precede the paralysis.

"From a clinical study of the cases now under consideration, I think I can approximately arrive at the different lesions. *Three* seem to have been due to direct pressure from the bony angle itself; *twelve* gave the history and progress of cases of reflex paralysis due to obstruction of the blood-supply; the *remaining number* were, I believe, from a myelitis by slow compression."[1]

A modification of the pathology then taught has been made by the extraordinary researches in bone tuberculosis within the past two or three years. I have little hesitation now in pronouncing the osseous lesion a tuberculosis of the vertebræ, and whether the inflammatory processes induced by contiguity and extension are of a tuberculous nature I confess my inability to decide. Whether the pachymeningitis, the meningitis, and the myelitis are tubercular or non-tubercular, this question, I think, has not been settled by pathology. The cases of spontaneous recovery and the cases of recovery under this treatment and that, would seem to militate against a tubercular hypothesis. Furthermore, the most ardent disciple of Koch, I am sure, will admit the existence of non-tubercular dependent upon tubercular inflammation. At that time the remedies on which we placed reliance were fixation and traction, blistering, the actual cautery, ergot, belladonna, nitrate of silver, and potassium iodide in moderate doses. The results obtained were not such as enabled me to speak with confidence of the remedies either singly or in combination. I had made myself familiar with the natural history of the paralysis of Pott's disease, with cases that had recovered spontaneously after all treatment had been abandoned, and this knowledge had made me skeptical to an extreme degree. The pathology was well rooted in my mind and I entertained strong hope that some remedy would yet be found that would enable us to speak with more positiveness in giving a prognosis in a given case.

A paper read by Dr. Seguin at a subsequent meeting of the Society on large doses of potassium iodide in chronic nervous lesions not specific in nature, and the discussion which followed the presentation of his paper, directed my attention to this drug as the possible solution of my problem.

[1] Journal of Nervous and Mental Disease, April, 1878.

An opportunity was not offered until August, 1883.

A man, thirty years of age, by occupation a plasterer, applied to me for relief from an incomplete paraplegia depending upon a compression myelitis in the upper dorsal region. He dated his spinal disease from a severe fall fourteen years before. Apart from the few symptoms pointing toward spinal concussion he suffered no material injury. He soon recovered, to all appearances, and ten years subsequently after much exposure as a Texas "cow-boy," he first complained of symptoms indicative of spinal caries. There were epigastric pains, tenderness on concussion, much rachialgia, and a stooping gait. A thirty-mile ride on horseback at this time was described as agonizing. On his way to New York by steamer, he found relief only in the prone decubitus. Finally, he came under Dr. Sayre's treatment in Bellevue Hospital, where it seems his disease was first recognized. The relief from the plaster jacket was prompt and decided. The treatment was continued a year and he fancied himself cured. In two more years a relapse came on and the loss of power in the lower limbs was of one month's duration when he first came under my observation. A well-marked bosse was seen in the dorsal region and he suffered from paræsthesia in the limbs, and paresis of the vesical sphincter. The reflexes were greatly exaggerated and he could with difficulty stand. Locomotion by the assistance of two canes was barely possible. I immediately began the iodide in ten-grain doses and took steps to secure a spinal brace as speedily as possible. The Paquelin was employed. At the end of a week the apparatus was applied and he was soon taking thirty grains of the potassium three times a day. Vichy was used as a vehicle for the drug and his stomach rarely ever rebelled. Within a month the improvement was decided and by the middle of November he was able to walk with much ease. The maximum dose he reached was forty grains three times a day.

By the beginning of the year he was attending business again, yet he still continued the iodide in the doses above-mentioned. From that time to the present he has been engaged quite actively, and has learned to promptly check any symptoms of returning paresis by a recurrence to the potassium in gr. xx. doses. The steel brace was substituted by a plaster-of-Paris corset, and this by the leather jacket. Three months, it will be seen, were required in which to bring about a cure.

Contrast this with a case in a male child, aged four, I first saw in May, 1882. This child came of a family in which phthisis existed, and with this diathesis as an inheritance had developed spinal caries four months after an attack of measles. The signs first observed were so like those of a lateral curvature that the case was thus diagnosticated by the family physician. A plaster-of-Paris jacket was applied, but it was not until the close of September that the patient was placed under my care. Signs were then suspicious of cervico-dorsal disease, instead of lumbar disease for which he was treated. All doubts were dissipated by November 1st, when a deformity in this region appeared, and explained at the same time the previous dorso-lumbar lateral curvature. A month later he began walking poorly, and complained of pains in the limbs. The reflexes were exaggerated, and areas of anæsthesia were discovered.

I immediately took the following precautions: Secured a head-support permitting no weight whatever to come on the cervical and upper dorsal spine; saw that he kept his bed, and under no circumstance was he allowed to stand or sit up; did not permit the mother or anyone to adjust the brace or head-spring, attending to this myself as infrequently as possible.

I ordered bromide of potassium to be taken at night when he was specially restless, and had him take belladonna carried to the physiological effect. As a matter of fact he seldom took the bromide; gave cod-liver oil and plenty of nutrients generally. Faradism was administered daily. I gave as prognosis, recovery from the

paraplegia under such circumstances within six or eight months. Nothing eventful occurred until the following July, when improvement began, and by the middle of August he was able to move the limbs about freely. I did not allow him to stand or to make any attempt at walking until September. His recovery has been exceedingly slow, and despite the most assiduous care there is now a kyphosis three-fourths of an inch on a chord of five.

One of these cases was in an adult, the other in a child. In one I had an incomplete paraplegia to deal with, in the other the loss of power was complete. In both, however, I had the intelligent and faithful co-operation of the patient and family.

In another case I did not have the co-operation of the patient, and the obstacles have been peculiarly trying.

Some time during the early part of 1883, a female patient, aged thirty, was referred to me at the Forty-second Street Hospital, out-door department. She was an inmate of the Nursery and Child's Hospital. Shortly after the birth of a child a dorsal kyphosis was discovered, and although the deformity was not very marked there was little or nothing in the way of a history to be obtained. She was supplied with a steel brace such as is used at the hospital, and special care was given to the accurate fit of the same. The suffering was not relieved to any great extent by the support given, and to relieve pain the Paquelin cautery was employed occasionally. Blisters, too, were used, and even with all this counter-irritation, narcotics had to be employed, so great was the pain she experienced during the exacerbations. The support was inefficient by reason of her persistence in removing the brace whenever she felt so inclined. I saw her very irregularly, and it was difficult to maintain any interest in her case. She seemed to grow worse, and the visits finally ceased.

In the spring of 1884 I was appointed a member of the visiting staff of the Nursery and Child's Hospital, and the first case to which I was called was my old case of Pott's disease. I found her with an increased amount of deformity and totally unable to get about the ward. I learned that she had been slowly losing power for at least three months. She had always been very stout and was consequently now a very helpless patient. The old brace was reapplied, and potassium iodide ordered. She rebelled against the potassium, claiming that it produced nausea. During the next twelve months she had routine treatment. Plaster-of-Paris jackets were used and gave adequate support. The potassium dosage got to be an old story, and some days she took small doses, some days large doses, and some days none whatever. Faradism was employed daily for months; massage was employed, and still she remained paraplegic. In response to my urging large doses of the iodide, I was invariably told that her stomach would not tolerate more than twenty-five or thirty grains three times a day. Mineral waters were used too as a vehicle, and every precaution seemed to be taken against the stomach disorder. It was asserted that she couldn't be kept quiet, that she would lift her child and do all manner of things that a good patient should not do. The lady managers discussed her case (the patient herself was very aggravating), and finally in solemn conclave they decided that "Mrs. K—— must go." This was about the first of March of the present year. It had been assumed that I regarded the case as incurable. The date of her going was not fixed, and the day after the above edict had been announced, I said to Dr. Hance, the resident physician, that if he would make this a personal matter, and see that Mrs. K—— got sixty- or seventy-grain doses of the iodide three times a day during the next ten days, she would be able to walk out of the hospital when the date of her discharge arrived, if it must arrive. It was well known, however, that the kind-hearted ladies who composed the board had no intention of carrying into execution their threat.

At all events, Dr. Hance set about his task with right good will, and when I called again, at the end of the ten days, he greeted me with the joyful report that Mrs. Kelly was able to move her feet about in bed, that she had stood with very little assistance, and that by the aid of himself and the nurse she had walked nearly one-half the width of the ward. The iodide had been pushed to drachm doses. Let it be remembered that the jacket she then wore had been applied two months before the date of our new departure. From that time to the present she has been gaining in power and in sensation, and her complete recovery is not far distant. The summer months are not good months in which to apply plaster-of-Paris jackets to persons of corpulent habit, and hence Mrs. Kelly has not had the attention in this respect that her case demanded. The iodide is still continued, but not in as large doses, the stomach is as tolerant of the drug as one can reasonably expect, and, strange to say, she seems not to have lost one pound of flesh.

Indeed, I am inclined to the belief that large doses of this drug tend to produce flesh rather than destroy it. I have never known a patient with compression myelitis grow thin under this treatment. A girl in Yorkville actually became obese, and I feared that a continuance of the drug might make her an object of envy for some dime museum. This is her case:

A girl, aged seven, of large build, and moderately stout withal, came under my observation in the out-door department of the hospital, January 30, 1884. She presented a kyphosis in upper dorsal region of one and one-fourth inch on a chord of seven, and the deformity was of two years' standing. The acute symptoms, for the relief of which she applied for treatment, were of recent date, and pointed to an exacerbation after a long period of immunity.

A steel brace was applied a week later, and on February 25th it was recorded that paraplegia was imminent, the reflexes being greatly exalted. A fly-blister was ordered, and a week later a head-spring was attached to the brace. At this time her paraplegia was nearly complete, and confinement to bed was ordered.

On March 12th, the symptoms having become more marked, potassium iodide in ten-grain doses was ordered, and by the 19th was increased to fifteen grains, three times daily.

It was observed that she was gaining rapidly in flesh, and was indeed becoming quite corpulent. The brace was a good fit, but the mother did not follow directions, and the child was dragging herself about the floor and up and down stairs without let or hindrance.

In April a diarrhœa was thought to be dependent upon the iodide, and the dose fell from twenty grains to ten grains. May 1st paresis of the vesical sphincter was observed, and a fortnight later there was marked diminution of sensibility. It was observed at this time, too, that the brace and head-spring were very imperfectly worn. She did not keep her bed, although the paraplegia was complete and her corpulency was still a notable feature.

The case was reported to me as making little headway, and one evening in July, I called to see if any cause could be found for this sluggishness. As I drove up to the door I saw my patient, "sitting out in the cool of the evening," enjoying the street scenes with quite as keen a zest as did any of her playfellows. She sat in the conventional high chair, with her immense limbs dangling below the step, while her head was fully released from the spring intended for its support. The brace about the body I found barely hanging by shoulder-straps and corset lacing.

I here saw quite plainly that I must expect no co-operation at this house, and I decided to apply as soon as possible a solid plaster jacket, and adjust the head-spring so that nothing could be removed. A few days later, at the Polyclinic, I succeeded in applying a good jacket

and headspring. I saw that she had a saturated solution of the iodide, and she began again on ten-grain doses. I insisted on having her remain in bed, but the order was very imperfectly carried out, and she sat up about as much as ever. The jacket had to be replaced by another after six weeks, by reason of her continued corpulency. She took the iodide now in forty-grain doses, and no stomachic disorder was observed.

On December 4th the mother reported that our obese patient was able to stand assisted by the wall only. A month later she was walking about the floor, and before the winter closed she walked up and down stairs. In May I examined her, and found that the recovery was complete. She has had no relapse.

It will be seen that this case improved, not immediately after the application of a jacket, but after the dose of the iodide had reached respectable proportions. I am as ready as any one to give the plaster jacket the credit it deserves. I am as enthusiastic as any one in my advocacy of fixation and rest for the diseased vertebræ, and I have observed cases wherein the improvement began only when these ideals were approximated. Take as an instance the following, which will also illustrate quite as well, I fancy, the value of the treatment we discuss this evening. Note, too, the encouragement one gets from a combination of external and internal therapeutics.

A female patient, aged twenty-one, was seen first in the out-door department of the Hospital for the Ruptured and Crippled, October 26, 1883. She worked in a silk factory. A history of pain in her back dated from the January preceding. A short time before that she had a fall, striking on her back. The pain, however, did not become severe until the beginning of September. At the time she presented at the hospital she complained of intercostal and abdominal pain, concussion caused pain in the dorsal region, and there was a kyphosis at the seventh dorsal spine of five-eighths of an inch on a chord of three and a half. The only region that showed any tenderness was in the lower dorsal. The Paquelin cautery was used freely, and a spinal brace ordered. Before the apparatus was completed, and three days later, the mother reported that she was very unsteady on her limbs, and walked with great difficulty. Numbness was first a marked feature four weeks from the date she came under treatment.

It was not until December 10th that another opportunity was offered for examination, when it was noted that the patella tendon on both sides gave morbid exaggeration of the reflex, that of left side giving the more marked. The ankle clonus was increased on both sides. The brace had already been applied and an excellent fit had been secured. My interest in the case was sufficient to insure her attendance at home, and one of my assistants was detailed to visit her as often as occasion demanded. My instructions were to employ the cautery at least once a week, to keep her in bed, and to give potassium iodide in increasing doses.

A note was made January 21, 1884, to this effect: She had not left her bed since December 10th, her digestion was good, general appearance ditto, but for the past three weeks the paraplegia had been complete, without involving, however, bladder or rectum. A pill, consisting of colocynth, belladonna, and nux vomica, once daily, had controlled the constipation. Clonic spasm of the flexors had been very annoying for a week. Cod-liver oil was borne well by the stomach. The cautery had been used as directed.

In March another note recorded excellent health, complete paralysis of motion, but with improvement in sensation. At this time she was taking belladonna and strychnia. The deformity had not increased, and the tenderness had disappeared. I find no record of any administration of the drug on which I had placed so much reliance. My own duties precluded the possibility of personal supervision, and as the assistant was an attaché of a neurological clinic, I left the case in his hands.

In the summer he did begin the use of the iodide, and reached by September twenty grains three times a day. The progress seemed so slow that I was led to make a change in the treatment. I found the girl in fair condition, and following directions religiously. The brace seemed to meet all the indications that were demanded, it was seldom removed and then removed and reapplied with extreme care; she kept her bed faithfully, and she was the embodiment of patience herself.

The deformity had not increased to any appreciable extent, but there was not the faintest trace of voluntary motion in limb, foot, or toe. The customary exaggeration of the reflexes, and the ordinary anæsthesiæ and paræsthesiæ were present. The sphincters were but slightly involved. The date of my observation was August 30th.

Assisted by my friend Dr. Hunter P. Cooper, of this city, I partially suspended the patient on September 2d, exercising the utmost care in this preparatory work, and applied a solid plaster-of-Paris jacket. Before leaving the house I saw that she had a saturated solution of the iodide, and ordered gr. xxx. t.i.d., to be increased rapidly to gr. l. The mother reported to me on the morning of the 5th, three days later, that our patient was able to raise the left foot from the bed. On the 15th I called at the house, finding her able to raise the left limb from the bed, and to flex the toes quite easily. The improvement continued, but at the end of a month she was still unable to walk. I found that the jacket had broken horizontally, and applied a new one [November 22d, soon after which, December 9th, she was walking about the floor with the aid of a chair. The subsequent notes simply record a continuance of the medicine in smaller doses (she had reached drachm doses), the occasional application of the cautery, the substitution this summer of a removable for the solid jacket, and an uninterrupted recovery.

A mere extended narration of cases would seem unnecessary, and yet I am very desirous of presenting another which shows the two methods of treatment in the same patient, who had two attacks of compression myelitis with an interval of one year.

Her case illustrates the value of faithful nursing, and that hearty co-operation of the mother with the physician in his management of the patient.

On April 6, 1883, a gentleman from Pittsburg, Pa., brought his four-year-old daughter to me at the Forty-second Street Hospital, and a classical history of Pott's disease in the upper dorsal region was furnished by the father in a letter received a week before. The disease was of one year's standing, and her ill-health at the close of her second year followed in the wake of measles with extremely tardy convalescence. Two or three acute exacerbations had occurred since the first signs of caries, and the present one began seven weeks before the little girl came under my observation. Loss of power was first discovered about March 10th, and within a fortnight the loss of power was complete.

The child's general condition seemed good, and but for the careful dorsal decubitus in which she was brought into the hospital one would not have suspected that the child was a sufferer from any disease. I found her, however, powerless in the lower limbs, and with this loss of power was an extraordinary amount of reflex excitability. A tap over the patella tendon, or over the body of the quadriceps femoris, or a slight sudden flexion of the foot would induce the most violent tetanoid movements in either limb. The sensation was much impaired, but the degree of anæsthesia was not measured.

The spinal deformity was in the upper dorsal region, the spinous process of the third dorsal forming the apex of the angle. The kyphosis measured three-fourths of an inch on a chord of seven inches. Spinal tenderness was present to a light degree. No time was lost in securing a good fit with a steel brace and head-spring, the object being to secure the maximum amount of fixa-

tion. Within a week the apparatus was applied, and the administration of belladonna was already a prominent part of the treatment.

Various paræsthesiæ were observed, such as: a burning sensation at times, cold sensation at others, the child complained of the presence of different foreign bodies between the toes, etc. Ergot was substituted a week later for the belladonna, and this in turn gave way to a stomachic and an alterative tonic. She occupied the bed, her mother's lap, and a rolling-chair in succession throughout the day, and no attempt was made to secure rest in the dorsal decubitus. From this time to June 1st the treatment varied. Blisters were used in addition to the different drugs employed, and she was allowed to go home, the further treatment to be conducted by mail.

The mother was instructed to keep the child in dorsal decubitus as much as possible. During the summer the parents became extremely solicitous, and other physicians were called in to examine and report. The recovery did not begin until the middle of August, and the close of November she was walking.

A year subsequently, in November, 1884, she was brought to me for a new brace, report having preceded her that the gait was becoming unsteady again, and that she became tired quickly on the slightest exertion.

The brace was found broken and giving very inadequate support. The child complained of pains in the epigastrium and in the feet. Loss of power was manifest, and there was exaltation of the tendon reflexes. The general health was apparently good, and I could see no other cause for the return of the compression myelitis than the failure of the brace to give support.

I clearly prognosticated a return of the paraplegia, and went about the renewal of the brace as speedily as possible. At the same time I determined to give the iodide in as full doses as her stomach would tolerate. So we began on ten grains three times a day.

It was not pushed rapidly, because I did not have the same knowledge then in its tolerance that I have now. The dose was increased by two or three grains daily.

There was, in fact, very little iodide administered until a week after her return home. We lost valuable time in giving oil and anthelmintics, waiting to have the "road clear" for the potassium. In the meantime, although a new brace had been fitted, the loss of power was increasing from day to day. It was two weeks before she began taking her medicine with any regularity, and then the paraplegia was nearly complete. By the time she had reached twenty-five grains, three times a day, the limbs were powerless.

This was December 10th. By the 17th she was taking thirty-five grains, and the reports were encouraging, *i.e.*, her stomach bore it well, and she was very happy, rarely complaining of pain or discomfort.

December 30th.—She takes forty-five grains, and her stomach bears the dose well. Still no return of power.

January 6th.—The dose not having been increased, it was observed that her stomach was disturbed, and that diarrhœa was present. For a day or two this dose was given only twice a day.

January 21st.—It was observed that she could move one foot feebly.

The dose was carried to fifty drops, and by the first week in February, she was able to bear her weight on the limbs. The compound syrup of the hypophosphates was begun about this time, and the dose of the iodide soon began to fall. By March 1st she was walking.

The subsequent history shows rapid progress, and a transfer of my notes to these pages is quite unnecessary.

I saw the patient in September of the present year, and could find no trace of the paraplegia.

From November 22, 1884, to March 1, 1885, I treated the case entirely by correspondence. A file of the letters written by the mother give to the case an interest as thrilling as that of romance.

It has been unnecessary to record the occasional stomachics, the infrequent doses of bromide of potassium at night.

I am quite sure that the iodide could have been administered in larger doses earlier and with much better effect. It occurs to me that the deposits or inflammatory thickenings which we seek to control, could be better controlled while they are yet new. In June I had an opportunity of testing this in the case of a little patient from Missouri. The test was not as thorough as I shall make when another occasion presents itself, yet I think a lesson can be learned from a study of the following:

A girl, aged two, came from the West, and was placed under my care June 17, 1885. She suffered from spinal caries, involving the upper dorsal vertebræ, and already a kyphosis had appeared. The first signs of compression myelitis were observed a week or two before she came under my observation. I found the reflexes on right side diminished, on left side increased. The loss of power was not marked, yet easily recognized. A removable jacket with headspring attached was worn, and was as serviceable as one of this nature could well be.

I applied a solid jacket as soon as possible, which was on the 24th. In the meanwhile the iodide was begun in five-grain doses, administered in dilute Vichy water three times a day. By July 3d she was taking twenty-five grains. She never became completely paraplegic, and while the loss of power increased until the date above mentioned, a return was then observed. In August she began to stand, and could raise her limbs from the bed and move them about in all directions with great ease. Two months from the date I first saw the patient I permitted the mother to take her home, the convalescing treatment to be carried out under the direction of the family physician.

In selecting a title for my paper, I purposely selected the terms, "large doses of potassium iodide," knowing very well that the doses I meant to record were not heroic by any means. I seldom give over one hundred and fifty grains in the day, and often I find it quite sufficient to give only a drachm. I do not believe in the sorbefacient effect of this drug in doses less than a drachm in the twenty-four hours.

In cases of compression myelitis the dose should be rapidly increased, and within the first week the patient should get from thirty to sixty grains three times a day. Dr. Seguin advocates its administration on an empty stomach. In the few cases in which I have attempted this mode the stomach has rebelled sooner than I had anticipated. I always, when practicable, employ Vichy or some other mineral water, as a vehicle, and I seldom have any complaints about nausea. Occasionally a diarrhœa seems to depend on the dosage employed. One cannot lay down any hard and fast rules. Individuals differ, and the dose for one is not the dose for another.

Children, as a rule, are remarkably tolerant of the potassium iodide. One hundred grains three times a day for a child suffering from cerebral or cerebro-spinal disease is not looked upon as anything extraordinary by neurologists.

The results in the cases I have reported show that our prognosis as to time can be made much more favorable. Formerly I never dared give a mother any hope that her child would recover from the paralysis short of six months. I usually gave the prognosis that twelve months would elapse before the child would walk. It is well known that many of these cases hang on indefinitely and seem to resist all methods of treatment. It is also well known that cases occasionally recover within a few days after the application of a plaster-of-Paris jacket, or a brace of any kind, or after a lively cauterization. These cases lack many of the signs of compression myelitis, and may be due to reflex causes, to anæmia, or hyperæmia. Again, cases of pseudo-paraplegia, cases in patients who

do not walk because of the position of the body are cured promptly when this position is corrected.

From my former paper I take the liberty of quoting a paragraph bearing on the prognosis:

"Of the 58 cases, 13 have died, 6 dying from mye litis, 5 from other diseases subsequent to the establishment of a cure, and 2 from tuberculosis before the complete restoration of power to the limbs. The mortality, then, is about 10½ per cent. Twenty-nine recovered from the paraplegia; 8 of these relapsed, and all recovered again save 1, who is still under treatment, along with the remaining 14 still unrelieved."

A case, the notes of which were handed me by Dr. L. E. Holt, just as I was completing my paper, illustrates several points worth mentioning.

A colored boy, aged five, developed caries of the spine in the upper dorsal region, early in the winter of 1884. In March he became paraplegic, the bladder being affected but not the rectum. The paralysis lasted about eighteen months, when complete recovery took place. The patient was never under any treatment whatever, either for his bone disease or his paralysis.

Since I have used the iodide in the manner above described, I have been able to give a prognosis much more favorable both as to time and completeness of recovery. I seldom hesitate to name three months, four at the farthest, in which recovery will take place.

Let it be distinctly understood that I do not rely upon the drug alone. My patient must have an apparatus that will secure the maximum degree of fixation. The better the fixation the more rapidly the case will recover, other things being equal. Let me summarize the points in the management of a case of compression myelitis—points legitimately drawn from the experience I have recorded in this paper.

1. Secure at the earliest possible moment immobilization of the spine, especially in the neighborhood of the vertebræ diseased.

2. Begin with ten grains of potassium iodide in mineral water—Vichy, I think, is best suited for most cases—three times daily after meals.

3. Increase the dose daily by five grains, until the stomach shows signs of intolerance.

4. Maintain as large a dose as the stomach will tolerate until convalescence is fairly established.

5. Do not lose sight of the apparatus employed, and replace it without hesitation and without delay whenever its inefficiency is demonstrated.

6. Keep the patient in bed the greater part of the day, and if he goes out see that the recumbent, or at least a semi-recumbent position is maintained. Under no circumstances permit efforts at standing until convalescence is fully established.

7. See that the general health does not deteriorate while special treatment is pursued.

23 Park Avenue, New York.

Naples Ready for the Cholera.—According to a correspondent of the *London Times*, Naples, despite the scourging it received last year for its filthiness, is in but little better condition to resist the cholera now than it was then. The city has now an abundant water supply, but it would seem that little use is made of it either by the civic authorities or by private individuals. The streets and dwellings are, many of them, as filthy as a year's accumulation of dirt can make them. The authorities have, within a few weeks, ordered about two thousand wells of impure water to be closed, but the execution of this order is not yet. When cities or countries persist in endangering the safety of their decent neighbors by breeding pestilences, they should be taken in hand and forced to clean themselves. That would be something much more worth fighting about than the possession of a few islands in the Pacific, or a strip of land on the coast of Africa.

Clinical Department.

ANOTHER FAILURE WITH CHLOROFORM IN THE TREATMENT OF TAPE-WORM.

Dr. Herman Gasser, of Platteville, Wis., writes that he was called upon to prescribe for a young lady, eighteen years of age, who was suffering from tape-worm. She had been carrying the worm for five years, and had tried many physicians and many remedies, including kooso, turpentine, oil of male fern, and chloroform. The latter, either alone, or mixed with oil of male fern, had been tried four times without success. Finally Dr. Gasser had prepared a decoction of pomegranate bark, eight ounces to the pint, and gave it in two-ounce doses every fifteen minutes until five had been taken. Then the patient became drowsy and faint, and the remedy was discontinued. This attempt was successful. The worm, with its head, was discharged, and the patient has now been freed from her unwelcome guest for over a year.

Progress of Medical Science.

The Breasts of Male Consumptives.—According to M. Leudet (*The Lancet*, September 19, 1885) there sometimes exists a congestive swelling of the breast of male consumptives that is related to the pulmonary disease. There is no deposit of tubercle. The author has observed three cases of this mammary enlargement. The breast is first swollen throughout, and has the characters of a disk whose diameter is about three to five centimetres. The skin that covers the gland does not exhibit any change in color, and the subjacent connective-tissue is unaffected. After one gland has enlarged the opposite organ may be affected. Pain is experienced in the diseased gland and may radiate round the thoracic wall. This swelling is especially liable to occur on the side the lung of which is most diseased, or when pleuritic attacks are notably present. The swelling is regarded as due to a congestion the result of irradiation from the central disease. The lymphatic glands are not swollen. After lasting from one to several months, the swollen mamma returns slowly to its normal size; suppuration has not been known to occur.

Two Cases of Herpes with Motor Paralysis.—Dr. G. Waller reports two cases of herpes, in which motor nerves were affected. A widow, aged sixty-eight, had a painful patch of herpes, covering the whole of the right side of the face, stopping abruptly at the middle line. After some weeks, the herpetic spots and the pain disappeared, being, however, replaced by paralysis of the same side of the face, with loss of taste on the right half of the tongue. The other case was that of an old man, who had a herpetic eruption situated on the anterior aspect of the upper arm on the right side; this was accompanied with severe itching and a pricking sensation. Eight days after the appearance of the eruption, he found himself unable to raise or extend the arm. There was no pain or swelling in the muscles or joints, and the electric reactions were normal. The herpes and the paralysis both indicated the circumflex and musculocutaneous as being the nerves affected. The treatment was electrical, and brought the case to a successful termination.—*The British Medical Journal*, September 19, 1885.

Lipocardiac Asthma.—Under the name of "lipocardiac asthma," Professor Cantani (*London Medical Record*, August 15, 1885) gives an account of the affection described by him since 1864 as "fatty heart asthma." The patient is perhaps quiet in bed or in an arm-chair, when suddenly, without any apparent reason, the rhythm of his respiratory movements is disturbed. Little by little, sometimes almost insensibly, his respirations be-

come more frequent, shorter, and more profound, amounting at times to a laborious and even stertorous dyspnœa. Gradually the respirations become less frequent and profound, returning by degrees to the normal. Such attacks are usually short in duration; severe attacks last only a few minutes, and mild attacks only about two or three minutes. At first the outbreaks are unfrequent—about once a month, or three or four in the course of the year; and then they follow fatigue, muscular efforts, or emotional disturbance. As time wears on, the attacks begin to recur at short intervals and without apparent cause. The origin of these symptoms, according to the author, lies not in mere fatty hypertrophy of the heart, but in fatty degeneration of the muscular tissue of the organ. The symptoms show themselves when the heart begins to be tired. With this muscle, however, fatigue means impossibility to continue its work with its usual power. It requires, therefore, a brief period of relative repose, of less energetic contraction. This, however, involves a less complete emptying of the ventricles. Now, during this period of relative repose, of fatigue of the heart, the quantity of blood driven into the lungs by the right ventricle, and to the rest of the body from the left ventricle, is, for the time, diminished. Not merely, therefore, is there less blood oxygenated in the lungs, but the blood that is oxygenated is distributed more slowly throughout the body. This insufficient supply of blood to the tissues provokes a nervous erythism, or general hyperæsthesia. The recognition of lipocardiac asthma is important, inasmuch as the prognosis is much more unfavorable than in any other kind of cardiac asthma. It must be distinguished from angina pectoris, with which it is apt to be confounded, and with which, in fact, it is rarely conjoined. Another disorder of respiration with which it might be confounded is Cheyne-Stokes' respiration. Cheyne-stokes' respiration, however, is a symptom in various morbid states. It has a different pathogenesis and a different significance. In it there is apnœa; in lipocardiac asthma, on the contrary, there is only dyspnœa. Cheyne-Stokes' respiration occurs at brief intervals, and does not occur long before death. Lipocardiac asthma occurs at distant intervals, and may occur for many years before death. The treatment of lipocardiac asthma consists in improving the general health of the patient. Against the symptoms, digitalis, convallaria, valerianate of quinine, caffein, cognac, red wine boiled with canella, etc., may be useful. In fatty persons who are not too old, ferruginous preparations may be tried.

Epilepsy and Ear Disease.—According to M. Boucheron epilepsy may occur in consequence of various diseases of the ear, such as tubo-tympanic catarrh, otorrhœa, or lesions of the mastoid process or labyrinth. Convulsive attacks of this nature may be observed in childhood or in adult life. The prognosis is favorable, but relapses may occur coincident with relapses of the ear disease. The precursory symptoms of an attack are increased deafness, vertigo, a sensation of pressure within the ears, etc. It would thus appear that in man, as in the lower animals, the ear may be an epileptogenous region, excitation of the auricular nerves producing convulsive attacks.—*Revue Médicale*, September 5, 1885.

Phosphide of Zinc in Dysmenorrhœa and Sterility.—In Mathews Duncan's lectures on Sterility in Women, he places dysmenorrhœa in the list of the best demonstrated sources of, or attendants on, such conditions. But, even if we consider dysmenorrhœa the cause of the sterility, the question of the treatment of the menstrual difficulty does not in many cases admit of ready answer. Certainly there are cases of dysmenorrhœa which may be rapidly and satisfactorily treated by dilating the cervical canal, this dilatation being by double-bladed dilators, rather than by other means. But there remains a large number of cases that present no indication for this method of treatment, and which, of course, are not benefited if it be tried. Now, some of these may possibly be cured by the use of phosphide of zinc, as recommended by Decoux, who found this medicine useful in many cases of dysmenorrhœa and of amenorrhœa. Decoux narrates a case where it twice proved effective in curing sterility associated with the former disorder. In addition to the success of this medicine in dysmenorrhœa, amenorrhœa, and sterility, he has found it remarkably useful in cases of hysteria, ataxia, anæmia, and neuralgia. He gives two granules, of four milligrammes each, morning and evening. Only the crystallized preparation should be used, as the powder is inert. He states that its preparation is so difficult, that, with a single exception, one scarcely finds in commerce any but an impure product, which is partly or completely ineffective.—*Med. News*, September 5, 1885.

The Significance of the Spiral and Central Fibres in the Sputum.—Vierordt and Jacksch doubt, according to a recent publication on this subject, the specific nature of these fibres, and declare that they have also observed them in pneumonic sputum. Pell gives additional weight to the testimony of the stated observers by two cases under his treatment. The first case was one of pneumonia, in a woman forty-eight years of age, who for a number of years had suffered from asthmatic attacks. In the sputum were found spiral fibres, with and without central ones, and isolated central fibres, all embedded in mucus and pus-cells; besides, numerous Leyden's crystals were also present. After the sputum lost its pneumonic character the spiral fibres had also disappeared, and did not recur even later, when typically asthmatic paroxysms set in again. The second case was one of pneumonia, in a woman fifty-five years of age, who at no time had had any asthmatic affection. Spiral and central fibres were again found in the sputum. In the autopsy the spiral fibres were found not only in the larger and finer bronchi of the infiltrated lower lobe, but also in the non-infiltrated upper lobe of the right lung, while they were completely absent in the left lung. The spiral fibres being soluble in potash-lye and baryta-water, it follows that they consist largely of a mucous basis. A very satisfactory explanation for the peculiar spiral arrangements of these fibres has not yet been furnished. It is highly probable, however, that they are caused by the onward motion of a tough, elastic mass through a very narrow channel, viz., the finer lumen of the bronchioles under the influence of the ciliated epithelial cells, the unequal contraction of the bronchial muscles, and, finally, that of the diaphragm. The contents moving in the line of the least resistance is forced to make these spiral motions. The central fibres may be regarded partially as an optical delusion, partly as resulting from a stronger turning of the finest fibres and subsequently greater consistency of them.—*Therapeutic Gazette*, September, 1885.

Unilateral Œdema.—Dr. Bassi relates a case of serous infiltration, limited to one side of the body, recurring at every menstrual period, in a young woman of rather delicate health. The œdema was strictly limited to the right half of the body, but the coloration, temperature, and sensibility of the two sides were equal, except that the skin on the right side could be reddened by slighter degrees of irritation. Coincident with the external œdema there was an infiltration of the right lung, as evidenced by the physical signs. At the time of these attacks there was also complete anæsthesia of the cornea on both sides and of the isthmus of the fauces. The right ovary was painful. Examination of the urine gave negative results. The patient presented various hysterical symptoms. The cause of this intermittent unilateral œdema was obscure. The condition could not well be referred to vaso-motor paralysis since there was no elevation of temperature or redness of the skin on the affected side. After about a year's treatment with bromide of iron and hydrotherapy, the patient was much better, although the hysterical symptoms had not wholly disappeared. —*Rivista Inter. di Med. e Chir.*, July and August, 1885.

A Fall of Two Hundred and Fifty Feet without Severe Injury.—Dr. Evans relates, in the *Bristol Med.-Chirurg. Journal*, the history of a girl who attempted suicide on May 8th, by jumping from the Clifton Suspension Bridge. The bridge is two hundred and fifty feet high, and has been a favorite place for suicides. Sixteen persons have been known to have succeeded in self-destruction by making this same leap. One other only was picked up alive, but survived only thirty minutes. Twenty days after the fall the patient was considered convalescent and able to walk without pain. There was apparently no permanent injury. As far as the writer knows, no case of survival after a fall from as great a height as one hundred and fifty feet has hitherto been recorded, and considers this instance as probably unique.

Should Arsenic be Administered to Nursing Women?—The question whether an infant at the breast can be poisoned by its mother's milk, when the latter has taken a large quantity of arsenic, recently came up in a medico-legal case in Paris. Dr. Brouardel was called upon to investigate a case where an infant had died suddenly, and the father was suspected some six months afterward of having attempted the mother's life. The child's body was exhumed and found completely transformed into adipocere, so that the viscera could not be separated from the other part. An analysis *en bloc* was therefore made. The body weighed six and three-fourths pounds, and contained nearly a twelfth of a grain of arsenic. It was decided that this quantity could not have been derived from the clothing or the soil. To decide in what proportions, if at all, arsenic is eliminated by the milk, Fowler's solution was administered to wet-nurses in doses ranging from three to twelve drops. It was found that the milk contained a comparatively large quantity of arsenic after these doses had been taken for several days. As much as one-sixty-fourth of a grain could be obtained from about three ounces of milk. Experiments on animals, to determine the effects on the milk of one large dose, were not very conclusive, but it was shown that arsenic in these cases was constantly eliminated by the lacteal glands. The greatest care should, therefore, be exercised in giving arsenic to nursing women.

Cocaine in Sea-Sickness.—Dr. Manasseïne, of St. Petersburg, gives an interesting account of the employment of cocainum muriaticum in sea-sickness (*Berl. klin. Wochenschrift*, August 31, 1885). He argued from its usefulness in the vomiting of pregnancy, that it would likewise be of value in this bugbear of ocean travel. He made a voyage himself in order to test the drug, and, finding among his fellow-passengers a man and a woman who were especially prone to the malady, made the following observation: Upon embarking he administered to each every two or three hours a teaspoonful of a solution containing two and a half grains of muriate of cocaine in five ounces of distilled water, with the addition of a sufficient quantity of rectified spirits of wine. In spite of very rough weather for a period of forty-eight hours, both individuals escaped sickness for the first time in their lives. He also treated successfully a six-year-old child after it had begun to be sick, and a girl eighteen years of age who had been sick for twenty-four hours before the cocaine was given. Her case being severe, she was given a double dose every half hour, and the result is described as being "truly magical." She remained well during the rest of the voyage. Similar results followed in three milder cases. The writer thinks it justifiable to infer that in this drug we have a certain and harmless remedy against sea-sickness.

Dermatolysis Associated with Molluscum Fibrosum.—The relation of dermatolysis, or, as it was called by Valentine Mott, pachydermatocele, to fibroma molluscum, which has been suggested by dermatologists, has recently been aptly illustrated in a case reported in *The Indian Medical Gazette*, August, 1885. A laborer, aged forty, entered the Indore Charitable Hospital for the removal of a large pendulous tumor which hung down from the left mammary region, reaching the level of the great trochanter of the femur on the left side. Examination showed it to be a dermatolysis, or, as Kaposi calls it, elephantiasis telangiectodes. It was further discovered by Dr. Keegan, who reports the case, that the whole body was covered with fibroma molluscum. No part of the surface, excepting the palms and soles, was free from the tumors, which varied in size from that of a pea to that of a walnut. The disease had begun thirty years before as a small tumor the size of a pea, growing about two inches to the left of the mamma. The fibromata began to appear at about the same time, and quickly invaded the greater portion of his integument. The weight of the tumor on removal was found to be two pounds and six ounces, and consisted of thickened skin and connective-tissue well supplied with numerous vessels. In this case the disease appears to have been hereditary, as the patient states that his mother had a similar growth in the same situation, which, however, attained only about half the size of his own. The author believes that the disease is only an exaggerated form of fibroma molluscum, and thinks his opinion is strengthened by the fact that the pachydermatocele began in the same manner as the small fibromata.

When does Syphilis Become Constitutional?—Discussing this interesting question in the *Nordist Medicinskt Arkiv*, 1885, Dr. Pontoppidian states his belief that the first manifestation of syphilis (the chancre), in its early stage, is a local disease, but that the syphilitic virus will infiltrate the adjacent tissues and glands in a short time afterward. This period he places at two or three weeks. He claims that constitutional infiltration does not take place during the first stage, or period of latency of the syphilitic virus. In support of his views he reports five cases, out of a large number experimented upon at the Copenhagen Hospital, in which auto-inoculations were made. The following case will serve as an example, as they are all similar: L. A—— was placed in the hospital August 12th, with a small foul ulcer in the sulcus coronarius, and reported infected sixteen days prior. The second day the ulcer was cleaner but somewhat increased in size, with hard infiltration. Inoculation was then performed in three places upon the abdomen of the patient, which the fourth day was noticed as without effect. The sixth day the places of inoculation were hardly perceptible. The fifteenth day adenitis inguinalis was in existence. On the seventeenth day at the place of one of the inoculations a little red not elevated spot was seen. The nineteenth day induration was noticed; the red spot increased in size and was slightly elevated; no constitutional symptoms. On the twenty-fifth day the papule was about the size of a pea, elevated and hard; syphilis had then appeared. Syphilitic maculæ were seen on the tonsils, and slight enlargement of the glands about the neck. Constitutional treatment was resorted to. The fortieth day the local lesion, both on penis and places of inoculation, had disappeared. Here, what appeared to be a negative result, at first, developed, after a certain period of incubation, the characteristic signs of syphilis. If this second inoculation be performed before the initial sclerosis or chancre has had time to entirely poison the organism, the result remains negative at first, but the period of incubation being completed, a new sclerosis is developed. The writer quotes Wallace, Puche, Boeck, and others as having reported cases where secondary inoculation had given rise to one or more fully developed lesions, where the virus was taken from a chancre and inoculated upon the affected individual. From his observations he believes that the chancre thus obtained will disappear before full development if the inoculation be not performed in the early part of the secondary stage, from the fact that the infiltration from the first lesion has become universal.

CAPSICUM ANNUUM IN DELIRIUM TREMENS.—Dulácska reports, in the *Pester Medicin-Chirurg. Presse*, four cases of delirium tremens treated with capsicum annuum. one of the cases was complicated with pneumonia, a second by extreme motor and psychical restlessness. The result in all the cases was more prompt than after giving chloral. Two grammes of the powder were given every hour; after the fourth dose sleep came on, together with profuse sweating, voidance of urine, and diarrhœa. The mode of action is surmised by Dulácska to consist in a reflex action of the intestinal irritation upon the pneumogastric, resulting in slowing of the heart's action. The venous circulation becomes more tardy and the consequence is sleep and profuse secretion of urine.

MULTIFŒTAL PREGNANCY.—The following case is reported in the *Medisinskoje Obesrenije*: A peasant woman, twenty-seven years of age, has been married nine years, and has menstruated regularly every three weeks and six days since her fifteenth year. Pregnant six times, labor normal. The last menses occurred October 14, 1884. In February this year she applied to a medical man, as the abdomen had increased so much in size that respiration was impeded. It was ascertained that the uterus was considerably enlarged, of a rounded oval form, with the fundus at the level of the scrobiculus cordis. To the right of the linea alba feeble cardiac sounds were heard; on the left small portions of a fœtus could be felt. The birth of a dead child took place on February 28th, at 8 P.M.; a few minutes afterward a second appeared, both breech presentations; and some minutes later, three more children, with their heads presenting. They were all born enveloped in amniotic sacs. The four last lived a short time. There was one placenta, weighing 585 grammes, to the periphery of which the umbilical cords were attached. All the children were females, and corresponded in size to their period of growth, each weighing about 590 grammes, with the exception of the first, which weighed 934 grammes, and was 41 centimetres in length. Several fingers and toes were missing from the hands and feet.

CONSTITUENTS OF BRAIN.—Baumstark has examined the brain-substance of the horse by improved chemical methods, and finds that the soluble salts, albumen, and organic extractive matters are present in larger proportions in the gray than in the white matter, the nuclein, combined cholesterin and lecithin, are nearly equal in the white and gray matters, but the white substance contains a preponderance of neurokeratin, free cholesterin, and protagon, and the gray contains the more insoluble albumen and connective tissue. The phosphorus contained in the ash of the white and of the gray matter is about equal. The author has contrived to isolate and study the hitherto doubtful protagon in such a way as to establish its identity.

TREATMENT OF PERI-UTERINE HÆMATOCELE BY ELECTRO-PUNCTURE.—At the meeting of the French Association for the Advancement of Science, held at Grenoble, in August of the present year, a paper was presented by MM. Apostoli and Doléris upon a new method of treatment of pelvic hæmatocele by negative galvanopuncture. A double advantage is claimed for this procedure. The first is that, if the negative pole be used, a soft, non-retractive eschar is formed and the resulting fistula remains patent for a sufficient length of time, while adhesions are formed between the pathological cavity and the mucous membrane. The second is that the electrical current causes a modification of nutrition and provokes a more or less rapid regressive action in the pathological formation. The puncture should be made as nearly as possible in the centre of the tumor, care being taken to avoid the uterus, intestines, or a large vessel. In order to determine the relations of the parts, a careful rectal and vaginal examination should be made. The current should be of the strength of one hundred milliampères, and the duration of its application should be from five to ten minutes. The Léclanché element is the one preferred by the authors. The negative pole is a trochar of medium size protected by a glass or caoutchouc sheath, and the positive pole a large cake of clay moulded over the abdomen or one of the thighs of the patient. Antiseptic precautions are used during the operation, and subsequently a strong solution of carbolic acid is injected twice a day into the vagina. The authors claim that, by the use of this method, a speedy cure of pelvic hæmatocele may be obtained, thus reducing very materially the gravity of prognosis. The operation should be performed at the earliest practical period. The danger of the procedure lies chiefly in the liability of wounding a large vessel and giving rise to hemorrhage, but this can usually be avoided by a digital examination made to determine the situation of any pulsating arteries.

TREATMENT OF THE CONVULSIVE COUGH OF CHILDREN.—The remedies directed against the convulsive cough of children may be divided into 1, narcotics; 2, antizymotics; 3, purely empirical agents. 1. (*a*) Bromide of potassium has not verified its alleged value at the polyclinic of Berlin; one hundred and twenty-two cases came under observation, twenty-six were treated with this salt alone; six of these only improved under its use, while the duration of the malady was in no way shortened. (*b*) Belladonna is one of the oldest remedies used in this affection; three to four drops of an atropine solution of five per cent. are recommendable. Fifteen grains of the extract may be given after supper, and this dose increased every five hours, until one hundred grains have been ingested altogether. This remedy owes its great reputation to its power of modifying the course and intensity of the paroxysm, and of shortening the convulsive stage. (*c*) Opium has no specific virtues in this affection, and ought not to be administered. (*d*) Hydrate of chloral is employed by Lorey twice daily in doses up to fifteen grains, with gratifying results. (*e*) Lublinski (the well-known therapeutist of Berlin) combines the extract of belladonna and hydrate of chloral with very encouraging results. The butylate of chloral requires further clinical trials to give us a correct estimate of its therapeutic utility. (*g*) The same can be said of propylamine. (*h*) Atomized ether applied to the neck, with the view of influencing the trunk and branches of the pneumogastric nerve, is a remedy of doubtful effect. (*i*) Nitrite of amyl is inadmissible. J. Roubart recommends the continuous current to the medulla oblongata, especially in small children. 2. (*a*) Quinine, in the state of either the sulphate or the hydrochlorate, is recommended by many physicians. (*b*) Other practitioners praise phenic acid, given either by inhalation or internally, but there is little definitely known of the value of this drug. (*c*) Inhalations of oil of turpentine have repeatedly given good results. (*d*) Inhalations of petroleum are recommended by Lesser and Hildebrandt, though others doubt their value. (*e*) Salicylic acid and salicylate of sodium have given various results with different physicians, and do not hence appear to be reliable. (*f*) Porrot eulogizes the vapors of phenylate of soda in the sick-chamber. (*g*) Nothing positive is known of the corrosive sublimate in this affection. 3. (*a*) The extract of chestnuts, prepared from leaves gathered in the fall, is not a specific, but appears advantageous. (*b*) Oxalate of cerium, in a daily dose of forty-five grains for a child one year old, and of four drachms for a child of seven years, is well indicated and advantageously used. (*c*) Hydrochlorate of pilocarpine is more of an abortive than a specific, but is to be used in small doses. Cassel mentions still ammonium, calomel, the mercurial inunctions, and tincture of myrrh, but none of these drugs can claim constancy and promptness of action.—*Therapeutic Gazette*, September, 1885.

LITTLE drops of water,
Little grains of milk,
Make the little doctors
Of Homœopathic ilk.

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A NOVEL VIEW OF MALARIA.

ONE of the most interesting problems in the whole range of medical science, and one which receives, and deserves to receive, the attention of some of the clearest thinkers of our day, is that presented by malaria in all of its manifold and erratic manifestations. Although, fortunately, in this latitude, the pernicious forms of malarial fever are, while by no means unknown, of comparatively rare occurrence, yet no small part of the physical ills from which we suffer can be referred directly or indirectly to the action of this poison. And in many portions of the globe not less than one-half of the mortality is due to this cause alone. But aside from the large part which this disease plays in the causation of human suffering and death, it is of itself an interesting subject of study. There are few other infections which are so proteiform in their manifestations, and so insidious in their progress as is the malarial, and it is equalled, if indeed it be equalled at all, only by the syphilitic and the tubercular. It is now very generally accepted, upon the authority of Tommasi-Crudeli, Klebs, Marchiafava, and others, that the malarial infection is due to the entrance into the organism of a special form of lower life, a schizomycete. But we are still in the dark as regards the mode of action of this parasite, for no satisfactory explanation has yet been vouchsafed us of the characteristic periodicity in the symptoms of malarial infection, or of the irregular forms which it so often assumes. For this reason any new theories, even if they be nothing more than guesses, are interesting, and, if advanced by men of scientific attainments and reputation for careful study, are worthy of some thought, however strange and improbable they may at first sight seem to be.

In the supplement of the *Gazzetta degli Ospitali* of July 12, 1885, is reported a lecture by Professor Arnaldo Cantani, in which he explains the theory held by him concerning the mode of production of the various types of malarial infection. Briefly stated, it is that the microbe of malaria, having gained admission into the organism, is carried to the spleen. The latter organ under this new stimulus suffers a disturbance of nutrition and increases in size. And the whole question of the febrile paroxysm, he says, depends upon the capsule of the spleen and the degree of elasticity of its contractile elements. When the capsule is yielding the organ increases little by little, but there is in no case access of fever, and we have the hypertrophied spleen of chronic malarial infection. When, however, the capsule is normally elastic it is stimulated by the presence of the malarial germs, and is excited to contract, squeezing the microbes out into the general circulation. Then a paroxysm occurs of chill, fever, and sweating. During the fever the micro-organisms are either destroyed or eliminated, and there follows a period of repose. But in the meanwhile the germs remaining in the spleen begin to multiply, the capsule is again stimulated to contract forcibly, and the blood is anew charged with the poison. Then comes the fever, and again a period of rest succeeds. If the spleen is normally sensitive the paroxysm occurs every day, for the strength of the contractile elements is speedily restored. But if the organ is less sensitive a greater stimulus is needed to excite a contraction, and a paroxysm occurs then only once in two or three days, the fever assuming a tertian or quartan type. Following out this line of reasoning the author accounts for all the various forms in which the malarial poison manifests itself.

This is an ingenious theory and serves not only to elucidate the vexing problem of malaria, but accounts also for the existence of the spleen and demonstrates its utility. For if there were no spleen to store up the microbes and squeeze them out as occasion requires, there might be no malarial fevers. We would suggest the extirpation of the spleen as a promising operation for the radical cure of malaria, and one that may in time assume a rank alongside of resection of the lung in pulmonary phthisis, or of decapitation for a cold in the head.

STARVING FEVERS.

IT was the wish of Dr. Graves that it should be written on his tombstone, "He fed fevers." It would appear to be the desire of Dr. Yandell, of Louisville, to have the opposite inscription, viz., "He starved fevers." In a recent number of the *American Practitioner* he gives some of his personal experiences upon this subject. He says: "While suffering from typhoid fever, during nine weeks I was delirious. Those weeks remain to this day a total blank, except in one particular, and that related to food. The recollection of my aversion to that is distinct. My nurse told me that I took food at no time without a remonstrance; that I not unfrequently flatly refused to have it, giving always as a reason that it was exceedingly distasteful to me. I made the same objection to every kind of drink other than water. I got no medicine, but was required to take milk, at first every three hours, then every two hours. I had frozen champagne, at about the same intervals of time. Three weeks after the delirium subsided, I stood on my feet for the first time. I am just as sure that food was given in this case oftentimes to my hurt, as it was always given against my inclination. Yet this was the practice of the time. And I fear it is far too much the practice of the present day. Since Tanner's protracted fast, I have been much less disposed than before to force food upon patients against their wishes. I have made some short fasts myself, in the hope of wearing out a rheumatism. My first attempt I continued for eleven days, taking in that time but three glasses of water a day. I felt no particular inconvenience from my abstinence. Last winter I fasted twenty-one days, also in a rheumatism, in which time I had not

more than a quart of milk, which I took hot. I cannot say that my disease was benefited in the least. But I was without appetite, was averse even to food, and, if I got no good from fasting, I at least escaped any of the inconveniences which might have ensued had I taken nourishment. In the last year I have treated five cases of typhoid fever practically without food, that is, without food except when called for, or when delirium was present, and then only when it was not refused."

Dr. Yandell is probably right in his view, that it is the practice of the present day to feed fevers and feed them well. Perhaps it is sometimes overdone; but, on the whole, it is safer to over-feed than to starve. Dr. Yandell is himself a personal illustration of the fact that over-feeding in typhoid does not kill. Typhoid fever is a long and exhausting disease. The tissues of the body are wasting with abnormal rapidity. It is rational to suppose that as much nourishment should be administered as can be digested, a point to be determined by watching the stomach, and by a careful examination of the discharges.

We feel very sure that the profession will never return to the practice of starving fevers, especially those which are long and exhausting. Yet it may be that Dr. Yandell's experience will prove useful in calling attention to the possibility of over-feeding, a practice which causes discomfort, if not absolute danger, to the patient.

ETHERIZATION DURING SLEEP.

It is settled beyond doubt that with extreme skill and care anæsthesia can be produced by chloroform in some cases during sleep. The possibility of accomplishing the same result with ether has, we believe, never been seriously discussed, and would seem *a priori* quite impossible. A case in which such etherization was successfully accomplished has, however, been recently reported in the daily papers. Two men, uncle and nephew, had been sleeping together for several days, when one morning the latter on awaking found that he had been robbed. Investigation led to the discovery that the uncle had purchased an ounce of ether, and had poured it on his nephew's pillow. While in a profound sleep, which he believed was induced by the ether, the thief stole the contents of his nephew's pocket-book, opened the window and made several ingenious arrangements in the room, so as to create the impression that it had been entered by some one from outside.

THE THEORY AND THERAPY OF OXALURIA.

The seeker after pathological certainty finds himself much baffled in studying the subject of the so-called oxalic acid diathesis. Dr. Prout first announced that the continuous and excessive excretion of oxalic acid in the urine, in the form of oxalate of lime, was accompanied by a peculiar train of nervous and dyspeptic symptoms, such as irritability, depression, hypochondriasis, flatulence, constipation, and palpitations. His views were endorsed by Golding-Bird, and became widely accepted. In 1845, Dr. Owen Rees threw doubts upon the correctness of Dr. Prout's views, and affirmed that oxalate of lime was formed after the excretion of the urine out of the ureters, and that its presence simply indicated lithæmia. Dr. W. R. Basham has subsequently confirmed the correctness of this view, which has of late years had its turn of popularity.

Dr. Dickinson does not accept the theories of either Dr. Prout or Dr. Rees in their entirety. Undoubtedly, he says, lithic acid in excess is a source of oxalate of lime, but in the condition known as oxaluria, where there is a long-continued excretion of pale, clear urine, rich in the oxalate of lime, the lithæmic theory is hardly sufficient, and the main fact of importance is the excessive excretion of lime and the other earthy salts. Oxaluria is not lithæmia, therefore, according to Dr. Dickinson, but it is a condition in which there is excessive loss of earthy salts associated with an active, restless, irritated nervous system. The term oxaluria might be abandoned, since the condition it designates is only a part or phase, a general condition (in which there is loss of earthy salts), and since most of these earthy salts are excreted in the form of phosphates. Dr. Dickinson reports cases in which the earthy salts are increased from an average of .003 per cent. to .03 per cent., or even .10 per cent., that is to say, from ten- to thirty-fold.

There has recently appeared in *Zeitschrift f. Therapie*, etc., an article by Dr. A Cantani, of Naples, on the subject of the "Theory and Therapy of Oxaluria." It is a very interesting contribution, in this respect at least, that it reproduces with a somewhat startling verisimilitude the early views of Prout and Golding-Bird. We do not wish to accuse Dr. Cantani of plagiarism, but if he has built up independently his views on oxaluria, it furnishes some corroboration of the old ideas as to the reality of such a condition as oxaluria.

Cantani states that oxaluria and oxalæmia (for he finds oxalic acid in the blood) is simply a symptom of a pathological condition in which the metabolic processes are at fault. The saccharine and oleaginous constituents of the food are not entirely oxidized into carbonic acid and water as they should be, but are in part changed into the incomplete end-product, oxalic acid. Oxaluria and oxalæmia are the anomalies of metabolism in which this process is simply slowed down. It is a kind of tissue laziness.

The most essential evidences of this disorder are, not the presence of oxalic acid in the urine or in the blood, but in certain clinical signs constituting a "symptom-complex" of the morbid state. These take on two phases, viz., (1) "oxaluria with hypochrondriasis and emaciation," and (2) "oxaluria with neuralgias and furunculosis." The first and severer form appears in persons of an irritable nervous system, the second and milder form in persons inclined to obesity. Under the first head, Cantani describes the familiar symptoms which have heretofore been usually associated with oxaluria as at first understood. Much the same category of symptoms has also been referred to neurasthenia and lithæmia.

With reference to therapeutics, Cantani follows with surprising closeness the views of Prout and Golding-Bird, viz., that the diet should be as near that of a diabetic as possible. He rigorously excludes almost everything but meat, fresh eggs, and soup. He even forbids green vegetables, and allows only a small quantity of milk. Out-door exercise, mountain air, and baths are recommended. In the way of medicines he prescribes

chiefly alkaline and saline draughts. In this he is supported by Niemeyer. On the other hand, the later English authorities advise mineral acids, strychnia, and occasional alkaline and mercurial purgatives. Neither Basham nor Dickenson believe in the need of a diabetic diet.

THE DOLLAR MEDICAL SHOP.

THE task of reformers is generally a thankless one. They are compelled to fight against habit, indifference, and prejudice. Conscious of their own integrity of purpose, they press on, nothing wavering, until their aim is accomplished. This integrity of purpose is their solace at every rebuff and in every disappointment. It is in this spirit that we beg leave to say a few words more concerning the vexed "dispensary question."

That the prevalent methods of managing dispensaries tend to the abuse of medical charity, and to gross unfairness to the medical profession, no one denies. Many condemn these methods and hold themselves aloof from such institutions, but after awhile they are found in the places they formerly condemned, and justify their sudden change of heart under the plea of self-defence. The maelstrom has engulfed them. All that can be said of these prevalent methods of management is that they differ only in flagrancy, and at the head of the list in this respect stands, in our estimation, the Out-patient Department of the New York Hospital, which may justly be styled the "dollar medical shop."

Upon the payment of one dollar a patient is entitled to twelve visits to the dispensary for the ensuing month. As is learned from the annual report for the year 1884, five thousand one hundred and sixty-nine persons availed themselves of this imposition during that year, and the total number of visits was twenty-seven thousand, five hundred and sixty-five. Each patient paid for medicine from ten to twenty cents per visit. Splints and surgical dressings were furnished free. The average daily attendance in each class was about twenty. There are on the attending staff about twenty-five principals and assistants. The time spent by them there on the days of their service averages from one and a half to two and a half hours daily. This is what the profession is doing for the dispensary. What is it doing for the profession at large?

In the first place, it is not granting the full enjoyment of its clinical privileges. Out of all its classes, of which there is, if we read aright, one daily in each of the seven divisions, students are admitted, or, at least, publicly invited, to but three. All these facts call for some plain speaking. The violation of the principles of true charity of which they are most flagrant illustrations has been going on for some time. The institution was ostensibly established for the relief of the respectable poor—those who are to be accounted so by their recital of their circumstances, their dress, and general appearance. The dollar-a-month plan has drawn a class (abundantly able, as a rule, to pay a physician) who look down upon the "ordinary" dispensary patient with a "holier than thou" air which the scripturally historical Pharisee himself might envy. The clientele of this institution is drawn without doubt from a less needy class than is that of the German Dispensary, and yet the managers of the latter institution made in our columns some time ago (THE RECORD, June 14, 1885), a statement to the following effect: During the first three months of the current year the cases of one hundred and ninety-two applicants for treatment were investigated by the Charity Organization Society. *Thirty-three per cent.* of this number, it was found, were abundantly able to pay for treatment outside. We characterized this work as the pioneer work in true charity reform, and such it was.

It is straining no point to say that an equal percentage of those applying for treatment at the dispensary of the New York Hospital do not belong to the "poor" class. Yet the institution is doing its work at the expense of the profession. The former takes all the glory; the latter does all the work. If this institution is sincere in its professions, it can no longer desire to see such a state of things continue. How can a remedy be applied? Through the agency we have indicated, by following the praiseworthy example of the managers of the German Dispensary. We know that the debt of the institution chartered by George III. reaches up among the hundred thousands, but we think they might afford one hundred dollars, which would secure the co-operation of the Charity Organization Society for six months. Sincerity would court investigation, but the latter is deferred. The number of persons treated must be as large as possible in order to furnish a justification of the chronic plea of the board of management for financial aid. The "governors" do not wish to be disturbed in their pose before the public as "dispensers of a great charity."

We realize that the dispensation of true charity on a large scale is no easy task. It never has been. So long as the present limitations of human nature obtain it never can be. A certain number of people in this city must rely on charity for medical attendance, but no encouragement should be given to that class who seek to evade their dues to physicians by the faulty management of dispensaries. The latter never ought to be money-making institutions. If the present abuse be not soon checked, it may be that each physician will have his own dispensary, that is, treat people free at his own office during certain hours. In that case the dispensaries would soon find their occupations gone, and their spheres of supposed usefulness properly narrowed.

THE SUPERVISION OF VACCINE COMPANIES.

SMALL-POX has appeared at Albany, N. Y., Newport, R. I., Peoria, Ill., Newark, N. J., New York City, and at several other places in the United States. Reports of its occurrence at new points are made almost daily. There is a prospect of a wide prevalence of the disease during the coming season, even if it nowhere takes on a markedly epidemic form. There is good reason, therefore, for municipalities and individuals to look sharply after the matter of vaccination, a matter which deserves a great deal more of public attention than it gets. At present, in all large centres, bovine virus in vaccinating is mainly used, and the steadily increasing demand for this has led to the formation of companies who undertake to cultivate and sell it, with a view, primarily, to making money. These companies are not, as a rule, under any official supervision, and are at perfect liberty to disseminate worthless crusts or septic poison among

the people. We learn, as an illustration, that with a lot of bovine virus recently sent to Montreal there were 102 trials and 102 failures, while other specimens have produced badly inflamed arms.

Here, surely, is a most anomalous condition of affairs. It is apparent, at once, that this cultivating and selling of virus should always be under some official supervision. Most States indirectly compel the vaccination of children, and they should, in all justice, see that this vaccination be made with pure and efficient material. Such supervision is exercised in some places, or else the health authorities supply vaccine, as in this city. But the public supervision of vaccine companies is not yet carried out as it should be, although it is a measure most imperatively needed for the security of the people.

PROGRESSIVE DISINTEGRATION.

THE past two or three weeks have witnessed a steady and continued disintegration of what is left of the organization of the International Medical Congress. Besides the resignations given in our last issue, we learn that Professor Henry I. Bowditch has refused to accept the Vice-Presidency, and Dr. Henry F. Campbell, late President of the American Medical Association, has declined a similar honor. The resignations are also reported of Dr. E. O. Shakespeare, of Philadelphia, Dr. Henry G. Beyer, U. S. N., Dr. John J. Mason, of Newport, Dr. Jerome S. Kidder and Dr. J. M. Flint, U. S. N.

Dr. R. A. Kinloch, of Charleston, S. C., in withdrawing from the organization, sends an indignant protest against the high-handed methods adopted by the organizing Committee, and its refusal to consider or treat fairly the views of those members desiring to secure harmony rather than have their own way.

Professor Bowditch, in announcing his withdrawal, sends a scathing criticism on the course of the present Committee to the *Boston Medical and Surgical Journal.*

There is a steady growth in the profession of the feeling of indignation against the impudent and wicked conduct of the gentlemen who are so obstinately bound to wreck the Congress. Every week brings new evidences of this and fresh lists of withdrawals. No amount of editorial vituperation in the organ which the profession is now supporting to its own hurt and shame can obscure this fact.

At present the Congress looks to be very much such a thing as Bright's disease, viewed from the standpoint of Dr. Goodheart, viz., "a magnificent scheme of decay."

THE QUARREL OVER RAG DISINFECTION.

FOR some weeks a lively warfare has been going on between the health officer of this port and the rag importers, as to the question of rag disinfection. The importers have secured the support of a part at least of the daily press, and are frequently posed before the public as martyrs to the obstinacy and dulness, to say no worse, of the health officer.

This gentleman has, however, been right in the course which he has chosen, viz., that of insisting upon the disinfection of rags coming from ports in infected countries. It is both possible and upon record that cholera and small-pox may be transported by rags, which when moist are admirably adapted for the development of cholera germs; and the country has a right to demand that proper precautions be taken, even if importers do not make quite so much money for a time. This is the position taken by a country so alive to its purely commercial interests as Great Britain.

Incidentally the controversy has developed some interesting conclusions on the subject of disinfectants. Several series of experiments have been made to test the destructive power of superheated steam and of the sulphur process on pathogenic germs laid away in bales of rags. It has been shown with apparently a good degree of certainty that these germs can be destroyed by both the steam and the sulphur process. Although such experimental determinations do not furnish perfectly conclusive results, they are tolerably safe guides, and at least the best we can at present get.

THE ACTION OF DRUGS AT A DISTANCE.

AT the last meeting at Grenoble of the French Association for the Advancement of Science, MM. H. Bourru and P. Burot, of Rochefort, presented reports of some very curious experiments with certain hystero-epileptic patients. MM. Bourru and Burot are attached, we believe, to the School of Naval Medicine at Rochefort, and their trustworthiness appears to be vouched for by the *Revue bibliographique Universelle.*

The most striking experiments were those illustrating the action of certain medicines at a distance. The hystero-epileptic patient being placed in a chair in the presence of the physicians, a fragment of opium is brought near him; it throws him into a heavy sleep.

Chloral placed at the back of the head caused a light sleep. Various emetics, such as ipecac and apomorphin, being placed near the patient, always, we are told, without his knowledge, caused vomiting.

In the same way alcohol caused a state resembling drunkenness; purgatives produced intestinal contractions; phosphorus produced tremor and hallucinations, etc.

All these phenomena were observed minutely, and sources of error, such as those of voluntary deception, of unconscious or conscious suggestion were believed to be excluded. It is highly probable, however, that the patient, through some of his senses, knew the character of the drug brought near him. The only interesting scientific fact is, therefore, that of the capacity shown to control the organic functions, so that at a certain suggestion diarrhœa, nausea, sweating, palpitations, etc., may be produced.

This capacity was further illustrated by observations in another case. Dr. Mabille, of La Rochelle, had a hystero-epileptic subject whom he mesmerized one evening, saying that at a certain moment he would bleed from the nose. At the hour specified the epistaxis occurred. In later experiments stigmata were brought out upon the arm by "auto-suggestion."

NOT FAR FROM THE TRUTH.—Little Boy: Pa, what is a hypophosphite?

Father (busy reading): Oh, don't bother me with your eternal questions. Probably some kind of a crank.

News of the Week.

ARRESTING PNEUMONIA AND PHTHISIS BY INTRA-PULMONARY INJECTIONS.—M. Lépine, Professor at the Faculty of Medicine, Paris, in a memoir presented to the Académie des Sciences by M. Marey, states that intra-pulmonary injection of solution of bichloride of mercury in pneumonia arrests the progress of the malady and suppresses the rhonchi almost instantaneously. Dr. Truck, a pupil of M. Lépine's, has obtained important results by locally treating cases of tuberculous phthisis according to this method.

THE COLLODION TREATMENT OF CHOLERA. — M. Bouley, at a recent meeting of the Académie des Sciences, presented a memoir by M. Arsène Drouhet, of Paris, on the treatment of cholera. He recommends painting the abdomen over with collodion. M. Marius Partrité, who practises in the War Department, appends a few pages to M. Drouhet's pamphlet. Last year he treated a great many cholera patients, and affirms that he effected some unexpected cures with M. Drouhet's remedy. M. Bouley said he should not criticize M. Drouhet's work, but could vouch for his honest intentions and scientific knowledge.

THE PREPONDERANCE OF FEMALE INFANTS in the West has received further illustration, according to the *St. Paul Globe*, which narrates the following: "The accession of twin girls to the family of the popular County Treasurer, at Fargo, the past week, calls attention to the general fact that from three-fourths to four-fifths of the births in Dakota at present are of the female sex. Apprehension is felt that the thing is being overdone in that direction. Some attribute it in some undefined, mysterious, psychological way to the woman rights' furor and the romantic and absurdly exaggerated pictures drawn by Colonel Donan of the scarcity of females in Dakota."

ANOTHER NEW MEDICAL COLLEGE.—It is hard to see what possible need Florida has for a medical college. We have received, however, the announcement of one which has recently been organized in Tallahassee. Curiously enough it starts full-fledged with an Emeritus Professor, who necessarily has never been anything but "emeritus."

IT IS INTERESTING to learn that there is a National Association of Undertakers, which held its annual meeting in Philadelphia last week, and voted not to offer a $1,000 prize for the corpse that had been best embalmed for sixty days.

"EPIDEMIC" is said to be the title of a new journal just started in the South. It is expected that everybody will take it.

DEATH OF DR. WILLIAM H. COGGESHALL.—We regret to announce the very sudden and untimely death of Dr. William H. Coggeshall, Associate Editor of the *Virginia Medical Monthly*. Dr. Coggeshall was a gentleman of more than ordinary promise, and had already attained an enviable position in medicine and as a journalist.

HONORING AN AMERICAN PHYSICIAN.— Under the title, "An English Welcome to Dr. Parrish," the *Medical Press and Circular* says: "Dr. Parrish, the eminent American apostle of temperance having visited this country with a view to inspecting the working arrangements of the Homes founded here for the treatment of confirmed inebriates, the occasion was seized to offer him a general welcome from the prominent temperance organizations in Great Britain. To this end the President and Council of the Society for the Study and Cure of Inebriety issued a large number of invitations to the Dalrymple Home at Rickmansworth, and on Saturday, the 19th inst., a special train conveyed the party to the Home, where, after lunch, a meeting was held in the new Concert Hall. The chair was taken by Dr. Norman Kerr, who, in an eloquent speech, welcomed Dr. Parrish to England. Among the subsequent speakers were Dr. Langdon Down, Dr. Danforth Thomas, Mrs. Lucas, and the Rev. Mr. Murphy."

THE TOTAL NUMBER OF PHYSICIANS in the world is estimated to be 190,000.

NEWPORT AND SMALL-POX.—According to a report furnished by the Secretary of the Newport Medical Society, Dr. W. Thornton Parker, the public vaccinators of the city, Drs. Barker and Sears, in a house-to-house vaccination, vaccinated 521, and were refused permission to vaccinate 707 persons. So that there is a large proportion of unprotected persons yet in that city. A great service would be done, according to the Secretary, if the teachers and pastors of private and parochial schools would insist on the vaccination of their pupils.

THE ATTEMPT OF ANTHONY COMSTOCK to obtain judgment against a number of New York druggists for selling an article prohibited by the Penal Code has caused considerable stir among that fraternity. We trust that Mr. Comstock will succeed in stopping the India-rubber branch of the drug business.

"THE MEDICAL PRESS OF WESTERN NEW YORK" is the title of a new monthly medical journal edited by Dr. Rosswell Park. It aims to represent the interests of the profession of Western New York and vicinity. In these progressive days it is perfectly natural that where there are two medical colleges there should be two journals. Both of our Buffalo contemporaries are interesting journals.

THE MACHINE FOR STATIC ELECTRICITY: A QUESTION OF PRIORITY.—Mr. D. Rosseau, of this city, writes: "I notice in your issue of the 17th inst. the description, by Ambrose L. Ranney, M.D., of a so-called new apparatus for generating static electricity. I am very much surprised at the similarity to the Induction Holtz Machine manufactured by me for nearly two years. With the exception of the rubber, the principle of the machine was discovered by Holtz, but the new construction, as described by Dr. Ranney, was devised by me, with the help of Charles Van Brunt and H. D. Hall. The first one I sold for medical use was to Dr. M. A. Pallen, in September, 1884; and one to A. C. Hutchinson, President of Morgan's Louisiana & Texas Railroad, also in the fall of 1884; and one to Dr. T. Hamilton Burck, December 18, 1884."

AMERICAN ACADEMY OF MEDICINE.—The ninth annual meeting of the American Academy of Medicine will be held at the New York Academy of Medicine, No. 12 West Thirty-first Street, New York, on Wednesday and Thursday, October 28 and 29, 1885. Interesting papers

will be read by Drs. Sibbet, of Carlisle, Pa.; McIntire, Jr., of Easton, Pa.; Marcy, of Boston, Mass.; E. H. M. Sell, of New York; Turner, of U. S. Navy; Dunglison and Lee, of Philadelphia; Nelson, of Cambridge, Mass.; Cushing, of Boston, Mass.; Jackson, of Philadelphia; Kelly, of Utica, N. Y.; and Bush, of Wilmington, Del. The Address will be delivered at eight o'clock on Wednesday evening, by Albert L. Gihon, A.M., M.D., United States Navy, President, on "What is Medicine?" The annual collation will take place on Wednesday evening, October 28th, immediately after the President's Address.

How not to Remove Dampness in the Static Electric Machine.—A correspondent sends the following reasonable statement: "The device resorted to by Dr. Ranney for removing dampness from within the case of his static electric machine (see The Medical Record, October 17th, p. 447) will amaze his readers. Burning an alcohol lamp within the case is equivalent to filling the latter with carbonic acid and the *vapor of water*, which are the well-known products of the combustion of alcohol."

Vaccination in Montreal.—Dr. L. D. Mignault, Professor of Anatomy, Victoria College of Montreal, writes: "I have read with interest your items upon our epidemic, and I am pleased to see that your information has been in general gathered from reliable sources. It is always a satisfaction to see the medical journals of a distant city giving full and truthful details of all that passes around us. At the same time I am sure that you will allow me to modify a statement which affects the reputation of a large medical school, and which would be a great injustice to its members in general. While admitting that we have upon our staff the 'influential man' referred to, allow me to state that he is not at present engaged in lecturing, having retired nearly a year ago on account of his age and infirmities. He, moreover, never had much scope to ventilate his views, as he held the chair of Materia Medica. We have among our body the President of the Provincial Board of Health, and several others who are earnest and active workers in the cause of vaccination. Moreover, our school published over a month ago a resolution in favor of vaccination which I enclose, and finally, nearly all our students have been revaccinated since the outbreak."

The Therapeutics of Hay Fever.—Dr. F. A. Burrall, of this city, writes: "In Dr. Beverley Robinson's article, in The Record of October 17th, on 'The Therapeutics of Hay Fever (so-called),' he refers to the effect of cocaine in producing 'secondary occlusion of the nasal passages, due, as I believe, to a paralytic condition of the turbinated structures caused by its action.' This observation confirms what I have observed in two instances, where I had given cocaine hypodermatically for the relief of what is usually termed nervousness. There was at first an agreeable calmative effect, which was followed, after one or two hours' interval, by what seemed to be not severe cerebral congestion. I think the expression which the patient used concerning the effect was that the 'whole thing rushed back upon him.' In this case there was probably a tonic contraction of the vascular coats, followed by sudden dilatation. The patient found the sensation rather disagreeable. It must be, judging from the published reports, that cocaine relieves some cases of hay fever very much, but it is not a panacea, as I have found from experience. I have recently, however, had an excellent result from its use in the case of a patient suffering from nasal catarrh, who had had frontal headache for about eight years. I prescribed a four per cent. solution, and told him to pass a brush dipped in the fluid well up into the nostrils whenever the pain troubled him. The relief obtained has been so great that the patient expressed his estimate of cocaine by saying that he considered it as 'worth its weight in gold.'"

Texas Physicians and Surgeons are working hard and ambitiously for the credit of the profession of their State. One interesting work, of which the first instalment was presented at the last meeting of the State Society, consists in a compilation of the surgical records since the year of annexation. This compilation has been brought down to 1877, and includes the notes of 1,837 operations, carefully classified. There will be an annual report of work of Texas surgeons, which will eventually bring the record to date.

Medical Affairs in Buffalo appear to be in a somewhat mixed state. There is a great deal of partisan feeling with regard to the two medical colleges. Certain gentlemen have also charged the medical staff connected with a large hospital with concealing deaths in making their annual report. The matter was unwisely brought before the Buffalo Medical and Surgical Association, and a great deal of bitter controversy resulted, to the great detriment of the interests of the Society. More brotherly love and fewer medical colleges are needed in Buffalo.

Medical Portrait Galleries.—The ordinary portraits of eminent physicians which appear in serial medical literature are apt to give painful impressions of artistic insufficiency and of wide departure from a high standard of personal loveliness. We are obliged to confess that we have seen several specimens which would furnish very admirable illustrations of unsuccessful pugilism and debauched manhood. It is with great pleasure that we congratulate the *Virginia Medical Monthly* on producing a finely etched portrait that has real artistic qualities. We commend it as a sample to those of our contemporaries who have contemplated conferring the questionable boon of a lithographed or wood-cut immortality upon their distinguished confrères.

A Minnesota Reformer suggests a tax on male celibacy, making forty years the limit of exemption. He proposes that the proceeds be directly devoted to the support of foundlings.

Professor Bamberger.—Great sympathy is felt for Professor Bamberger, of Vienna, who was accidentally killed while making the ascent of a mountain. Professor Bamberger had just been elected Rector of the University of Vienna, but felt obliged to decline the high honor.

A New Anæsthetic Mixture, composed of dimethyl acetal ($C_4H_{10}O_2$) two volumes, and chloroform one volume, has been used at the Strassburg surgical winter, and Dr. F. Fisher reports fifty cases illustrating its action. It is not followed by vomiting, and it stimulates the heart. It is especially useful in children, or in cases where there is heart or renal disease.

THE MONTREAL SMALL-POX EPIDEMIC does not decline in violence, and will not be likely to do so until all the material has been used up. The authorities, now that it is too late, are beginning to make strenuous efforts to limit the spread of the disease. On the 20th inst. the local Board of Health passed a resolution advising the closing for a month of all theatres, churches, skating-rinks, and all places of public resort. Such a measure would involve a great sacrifice for a doubtful return, and will hardly be adopted. Montreal must attempt a complete and systematic house-to-house vaccination with good virus. This, with thorough cleanliness and proper quarantining of cases, would have checked the epidemic at first, and may help to do it now.

A MISAPPREHENSION.—When the father of a family has been successfully vaccinated, says a Montreal paper, it is frequently his custom to ask for a certificate for the whole household, vaccinated or not. A good deal of trouble is caused the public vaccinators from this cause, paterfamilias often needing a good deal of argument to convince him.

DR. WILLIAM WORKMAN, for more than forty years one of the leading physicians of Worcester County, Mass., died at his residence in Worcester on October 17th. He was born in Coleraine, Mass., in 1798, and was graduated at the Harvard Medical School in 1825. He practised for ten years in Shrewsbury. Dr. Workman joined the Massachusetts Medical Society in 1831. He removed to Worcester in 1835, and continued in active practice in that city until 1869, when he retired. He held numerous positions of public and private trust, and for ten years was a trustee of the Lunatic Hospital in Worcester.

PREPARING FOR HOSPITAL SUNDAY.—The Hospital Saturday and Sunday Association held its first meeting since January on Monday last. General Agent Frederick F. Cook said in his report that the outlook for the ensuing year was most encouraging. Circulars requesting contributions are to be placed at the disposal of merchants and manufacturers throughout the city, and all lines of trade are to be thoroughly canvassed. Benevolent lodges and all suburban churches within fifty miles of the city will be invited to swell the collections.

THE LATE DR. GEORGE ALT-MÜLLER.—Dr. George Alt-Müller, who died at Glen Cove, L. I., October 13th, was born in Schwartau, Germany, October 4, 1808. In 1832 he matriculated at the Frederick William University. Among his professors are included the names, Von Graefe, Schlemm, Rose, Link, Ehrenberg, and Mitscherlich. In May, 1835, he received his degree as Doctor Medicinæ et Chirurgiæ from the Christian Albert University, Berlin. His thesis, "Non nulla de Epilepsia," recorded original investigations, and conclusions which have been amply verified. He began the practice of medicine in Lübeck, where he was the colleague of Leopold in hospital work for several years. In 1848 he became a citizen of the United States, and two years later settled in Jericho, L. I. His practice grew rapidly, and extended over several townships, until in 1860, in response to the repeated calls of many friends, he removed to Glen Cove. He was a member of the Queen's County Medical Society, and was elected its President in 1867. Though actively engaged in the practice of his profession for many years, Dr. Alt-Müller's life was essentially that of the student; he was learned not only in his profession, but in the allied sciences. He was especially interested in botany, an accomplished microscopist and electrician. With his scientific attainments he united a rare charity and gentleness of speech and manner, and enjoyed the esteem and confidence of a large clientage. He died full of years and crowned with benedictions.

THE MEDICAL FACULTY OF JOHNS HOPKINS UNIVERSITY.—Five of the chairs in the future medical department of Johns Hopkins University have now been filled, as follows: Dr. H. Newell Martin, Professor of Biology; Dr. Ira Remsen, Professor of Chemistry; Dr. William H. Welch, Professor of Pathology; and Dr. John S. Billings, U.S.A., Professor of Public Hygiene; Dr. Matthew Hay, of Edinburgh, Professor of Pharmacology. So far, the chairs have been most creditably filled.

COCAINE IN HAY FEVER.—Dr. J. W. Stickler, of Orange, N. J., in correcting an error in an article of his on this subject in the October 17th issue, writes: "I wish to say that Allen's cocaine tablets are worthless as a remedy for 'hay fever.' I say this because they were recommended as a good 'article,' but careful trial failed to show any cocaine effect."

Reviews and Notices.

THE MANAGEMENT OF LABOR AND OF THE LYING-IN PERIOD. By HENRY G. LANDIS, A.M., M.D., Professor of Obstetrics in Starling Medical College, etc. 8vo, pp. 334. Philadelphia: Lea Brothers & Co. 1885.

OBSTETRICAL treatises, says the author in his preface, are usually written for both students and practitioners. If they are particularly adapted to either one of the two —alone—they are not of service to the other. "The aim of this book is to serve as a guide to practice, divested of all superfluous or irrelevant details." Its teachings are in the highest degree orthodox, but we fail to find in them any new information. In fact, it rather seems to us as if the spirit had said to the author "Write a book," and had been so unkind as to forget to name the reasons for so doing. It may save, however, some trouble in looking through more bulky volumes for the facts one is in search of. Its literary style is commendable; its typographical appearance is excellent.

POISONS; THEIR EFFECTS AND DETECTION. A Manual for the Use of Analytical Chemists and Experts. With an Introductory Essay on the Growth of Modern Toxicology. By ALEXANDER WYNTER BLYTH, M.R.C.S., F.C.S., etc. With Tables and Illustrations. Vol. II. New York: William Wood & Co. 1855. Wood's Library of Standard Medical Authors.

WE have already spoken in terms of warm praise of the character of this work. Giving as it does a complete history of poisons in all but their strictly medico-legal relations, Mr. Blyth's treatise cannot but be of great practical service in many of the emergencies of the general practitioner. The present volume completes the vegetable and animal poisons and takes up the subject of metallic poisons. Two appendices—on the examination of the blood and on treatment of cases of poisoning—conclude the work.

TRACHEOTOMY IN LARYNGEAL DIPHTHERIA: AFTER-TREATMENT AND COMPLICATIONS. By ROBERT WILLIAM PARKER. Second Edition, pp. 124. London: H. K. Lewis. 1885.

THIS monograph has for its avowed purpose, first, "to advocate the utility and importance of local treatment in cases of laryngeal diphtheria (membranous croup); and second, to give, for the use of house surgeons and practitioners, short but detailed instructions as to how such treatment may be easily carried out."

The author justly recognizes that the after-care, as indeed is the case in most operations, is often more than two-thirds of the battle, and his concise and explicit directions will be appreciated by those who have sought in vain in more extensive works information in these particulars.

INEBRIISM: A PATHOLOGICAL AND PSYCHOLOGICAL STUDY. By T. L. WRIGHT, M.D. Pp. 222. Columbus, O.: Wm. G. Hubbard. 1885.

DR. WRIGHT has set himself the task of interpreting inebriety according to the most recent ideas of nervous force and its physical basis. It is a trifle, perhaps, but one cannot help stumbling over the coined word, *inebriism* which is used for a title, and suspect the author of straining for effect in substituting it for the legitimate word *inebriety*.

Anecdotes and cases illustrate the author's ideas and serve to clinch his arguments. The general reader, perhaps more than the medical, will find it interesting reading.

ON RENAL AND URINARY AFFECTIONS. By W. HOWSHIP DICKINSON, M.D. Cantab., F.R.C.P. Pp. 343. New York: William Wood & Company. 1885. Library of Standard Medical Authors.

DR. DICKINSON'S present work is supplementary to that on "Albuminuria" (published in Wood's Library in 1881). Together these volumes form a comprehensive treatise on renal affections, which must take a solid and enduring place in medical literature. Dr. Dickinson is one of the most satisfactory of medical authors. To a mind eminently practical in turn, he adds a large clinical experience, a thorough knowledge of pathology, and a mature and conservative judgment. He has few theories to advance, but prefers rather to present clinical facts as they are, and abides finally by the judgment of experience rather than scientific deduction. His present work takes up a large variety of topics: Abscess of the kidney, pyelitis, perinephritis, thrombosis and embolism, renal tumors, malignant disease of the kidney, tubercle, hydro- and pyo-nephrosis, renal cysts, renal calculi, movable kidney, urinary paraplegia, diseases of the ureters, renal parasites, chyluria, hæmaturia, phosphaturia, albuminuria, suppression. Among the most attractive features of this work are the tables showing the varieties of epithelium from the healthy urinary tract, the cuts illustrating the relations of renal tumors, and the tables showing the relation of albuminuria to other than renal disorders. The author gives a table showing the not very promising results of the excision of the kidney for malignant tumors. Of eleven cases operated upon only three recovered. Tables showing the results of nephrectomy and renal lithotomy are also given.

DISEASES OF THE HEART AND THORACIC AORTA. By BYRON BRAMWELL, M.D., F.R.C.P.E., With Three Hundred and Seventeen illustrations. Pp. 773. New York: D. Appleton & Co. 1884.

DR. BRAMWELL'S treatise on "Diseases of the Spinal Cord" showed him to be a writer with tremendous powers of absorption, systemization, and illustration. Ability in all these directions is abundantly shown in the present large volume. We are not quite so profusely loaded with pictures, cross-sections, and colored lithographs, but there is sufficient of them, and the author shows himself to be a good pathologist and to have had a wide clinical experience on the subject of which he writes. The present work is evidently the result of long and patient labor and accumulation of material.

The author begins his treatise by an account of the anatomy and physiology of the heart. The physiological descriptions are based largely upon the views of Gaskill, and represent the latest theories regarding cardiac innervation. Dr. Bramwell gives us a taste here, also, of his skill in diagrammatic representation.

Proceeding with his usual system, the author then takes up the subject of the general pathology of the heart. This method of dealing, first generally and then specially with a subject is an attractive one to writers, but it must be confessed that it often leads to diffuseness, repetition, and ultra-refinements in classification.

The important subject of the clinical investigation of cases receives careful attention. The author gives a synoptical table for use as a guide in case-taking. A discussion of the symptoms as related to age, sex, occupation, with descriptions of the pathology of different symptoms, follows. The mechanism of Cheyne-Stokes respiration is discussed, and some interesting illustrative diagrams are given. We think that the author's explanation of this curious phenomenon is the most rational, as it is the most simple one.

A reader will naturally turn with interest to the chapters on the physical examination of the heart and organs of circulation. The author deals with this part of his subject with great minuteness. We have here given us, in fact, a very complete work on physical diagnosis as regards the heart. It is somewhat discouraging, however, to read so many opinions and theories bearing upon certain parts of this subject. The mechanism of murmurs, their reduplications, combinations, and significance are still evidently matters largely of speculation, and he must be a patient and enthusiastic student who will try to follow the why and wherefore of each different teacher's opinion. In his descriptions of the use of the sphygmograph, the author gives an account of the various tracings in disease and health, and shows us their helpfulness in the study of dicrotism, vascular tension, variations in pulse, volume, rhythm, etc. We miss, however, a comprehensive and practical summary of the uses of this much-discussed instrument.

The various chapters which take up the special diseases of the heart and its membranes cannot be discussed fully here. The same carefulness in method and preciseness of detail are exhibited as in the first half of the book. Numerous tables for differential diagnosis are given. We may mention briefly some of Dr. Bramwell's views upon the more interesting practical points. He believes that the salicylates in acute rheumatism tend to prevent heart complications. In dangerous pericardial effusion the author recommends puncture, without, as it seems, having had any personal experience in the matter. In the treatment of chronic mitral incompetence, the author places much confidence in arsenic. Caffein and glonoin are recommended in cardiac venous engorgement. The treatment for mitral stenosis is identical with that for mitral incompetency. In aortic regurgitation the prognosis is more favorable and life more comfortable, barring accident, than in mitral lesions. Arsenic, iron, iodide of potash, and digitalis are to be used in treatment. The author does not give a satisfactory account of the acute cardiac dilatation toward which so much attention has been directed of late years.

Dr. Bramwell has written a work on the diseases of the heart which is easily first among treatises on this subject. While not such easy reading as some of the older books, it is an indispensable work for study and reference.

THE UNIVERSAL BENEFACTOR is the comprehensively philanthropic title of a new periodical devoted to the subject of preventing adulterations in food, drugs, etc.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, September 23, 1885.

JOHN A. WYETH, M.D., PRESIDENT, IN THE CHAIR.

RECURRENT EPITHELIOMA OF THE PENIS.

DR. WILLIAM PERRY WATSON presented a specimen, and also the patient from whom it was removed, a laborer, forty-nine years of age, born in this country. The family history was good. The patient had always been in good health, barring accidents. Dr. Watson was called to see him about two years ago, at which time he had a profuse hemorrhage from the penis. The glans and a large portion of the body of the penis were in a state of ulcerative degeneration, resembling very much an epithelioma. The question arose, Was it an epithelioma or a case of simple ulcerative destruction of tissue? At any rate, the indications were to remove the diseased tissue, for the patient was reduced from repeated attacks of hemorrhage. It was learned that he had always suffered from a tight phimosis, interfering with the free escape of urine, and causing ballooning of the foreskin during micturition. In 1865, while sitting at table, a fork was thrown at him, and as he receded from the table one of the tines pierced his clothing and wounded the dorsum of the glans penis. Considerable hemorrhage followed, but not sufficient to cause him to call a physician. Soon afterward he was admitted to Bellevue Hospital, where he said Dr. Hamilton amputated the foreskin and indurated tissue, but did not touch the head of the organ. It was probable the induration, of which the patient spoke as having been removed by Dr. Hamilton, was simply a clot of coagulated blood. After this he had no trouble for about six months, when he noticed on the under surface of the penis, near the frænum, a small growth of bright red color, which looked like a wart. This continued to grow, and, being constantly irritated, he had it removed about six months later. Another six months passed, when, on the base of the wart, an ulcerative process set up and extended to the glans, and during the year prior to Dr. Watson's attendance, had caused hemorrrhage sufficiently profuse to reduce his strength and necessitate amputation. There was no enlargement of the inguinal glands. Circular amputation was performed through healthy tissue; the urethra was slit up and stitched to the skin. The man made a rapid recovery, going out on the ninth day. His condition had since remained good; there was still no enlargement of the inguinal glands, but the epitrochlear glands were slightly increased in size. There was no history of specific trouble.

THE PRESIDENT said the fact that the man had had phimosis was worthy of attention. During the past eighteen months he had seen four cases of epithelioma of the penis, in three of which he performed amputation, and the nature of the disease was verified by microscopical examination, and in all four cases there had been a history of phimosis. Since then he had asked a number of surgeons who had performed this operation what had been their experience, and he had not learned of a single case of carcinoma of the penis in which there had not been phimosis. This was certainly another indication for circumcision.

DR. WATSON added that he presented this case as illustrating the necessity for relief of phimosis in children, as the epithelioma undoubtedly resulted from that condition.

VERMIFORM APPENDIX, SIX INCHES LONG, ATTACHED TO THE HEPATIC FLEXURE OF THE COLON.

DR. LOUIS WALDSTEIN presented an unusually long vermiform appendix (sixteen centimetres), found in dissecting a body at the German Hospital. Another point of interest was the fact that instead of the process lying in its usual position, pointing downward in the pelvis, it extended upward toward the hepatic flexure of the colon, to which it was attached. Its position was parallel to the long axis of the body. He had seen several similar but somewhat shorter specimens.

BILIARY AND RENAL CALCULI IN THE SAME PATIENT.

DR. WALDSTEIN also presented a renal calculus, composed of urates, which was interesting in connection with the clinical history. Mr. S—— was seen by him last April, when he was suffering from severe pain in the abdomen. On examination the greatest tenderness was elicited on pressure over and a little to the right of the epigastrium, from there radiating over the entire abdomen. There was also slight icterus of the conjunctivæ and integument. Further observation of the case, with examination of the fæces, led to the diagnosis of biliary calculus, with the occasional passage of a stone through the duct, causing the usual paroxysmal pain. The patient was put under the Carlsbad treatment and steadily improved. It was learned that he had been suffering from gastric trouble for eleven or twelve years, and in such cases, Dr. Waldstein remarked, there often developed after some time trouble with the biliary secretion, and we find small biliary concretions in the fæces. In this case he found large numbers of small stones in the fecal discharges. One night last June Dr. W. was called to see the patient in another attack, but he found the picture entirely changed; instead of locating the centre of pain in the epigastrium, it started from the right lumbar region and extended downward, and was traceable along the ureter and right leg. There was diffuse pain over the abdomen. The gentleman told him that while micturating he felt a peculiar sensation at the glans penis, and also a sensation of dizziness, and saw occasionally muscæ volitantes. A fact which struck Dr. W. as peculiar was that all the attacks of pain were associated with a tingling in the tips of the fingers of both hands. The conclusion was reached that there was some deposit in the pelvis of the kidney or high up in the ureter. Improvement took place under treatment, and a week ago the patient sent him the stone presented, which had been passed with his urine. Dr. W. presented the case without further comment than that here was a person who had suffered from digestive derangement for a number of years, and who finally developed both biliary and renal concretions.

THE PRESIDENT asked, regarding the first specimen, how firm was the attachment of the appendix?

DR. WALDSTEIN replied that its attachment to the colon was firm, but that it could be separated. He received the impression that there had been some local peritonitis, that there was some dislocation of the colon downward, during which the adhesion of the appendix took place; the colon afterward assuming its natural position, carried the appendix with it.

THE PRESIDENT recalled having seen a greatly distended vermiform appendix when in Bellevue Hospital. He believed it was now in Wood's Museum. He had not seen any as long as the specimen presented.

The Society went into executive session.

READY-MADE ILLUSTRATIONS.—Every medical man who records his cases either for publication or for private use, will appreciate the clinical figures published by Danielsson & Co., of London. These are outline illustrations of various portions of the body and of the different organs upon which the location of the lesions can be marked. Each diagram has a gummed back, so that it can be readily pasted in the case-book. The illustrations of various sections of the brain and spinal cord are especially worthy of note, and cannot but be very useful to every student of cerebral pathology. The labors of hospital internes would be much simplified, and the records kept by them rendered much more lucid, by a free use of these anatomical diagrams.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, October 15, 1885.

A. JACOBI, M.D., PRESIDENT, IN THE CHAIR.

THE ACADEMY FREE FROM DEBT.

DR. F. A. CASTLE, Treasurer of the Board of Trustees, reported that the final payment on the original mortgage of ten thousand dollars had been made, leaving the Academy entirely free from debt.

SECTIONS IN THE ACADEMY.

DR. A. B. JUDSON, Secretary, reported that the *Surgical Section* had organized with Dr. Stephen Smith, Chairman, and that the stated meetings would be held on the *second Monday* evening in each month, at the Academy, beginning at eight o'clock.

DR. A. S. HUNTER, Chairman, announced that stated meetings of the *Section in Obstetrics and Diseases of Women and Children*, would be held on the *fourth Thursday* evening of each month, at the Academy, beginning at eight o'clock.

DR. E. DARWIN HUDSON, JR., Secretary, gave notice that the stated meetings of the *Section in Practical Medicine* would be held on the *third Tuesday* evening of each month, at the Academy, beginning at eight o'clock.

The stated meetings of the *Section in Neurology* will be held on the *second Friday* evening of each month, at the Academy, beginning at eight o'clock; Dr. L. Putzel, Chairman.

The *Section in Ophthalmology* will be organized October 19th, the *third Monday* in the month.

DR. STEPHEN SMITH then read a paper entitled

THE COMPARATIVE RESULTS OF SURGICAL PRACTICE IN BELLEVUE HOSPITAL.

It was published in THE RECORD for October 17, 1885.

DR. A. C. POST was invited to open the discussion, and remarked that he had been very much interested in the lucid account, given by the author of the paper, of the marked improvement in the more modern surgery of Bellevue Hospital. He was prepared to sanction what Dr. Smith had said with regard to cleanliness, but thought there was still room for doubt as to how much antiseptics had contributed to the success obtained in surgery at the present time. Thorough cleanliness is in all respects very important, and the seclusion of the wound from external influences is also an important item in its treatment. His doubt was based upon the experience of European operators, especially Lawson Tait and Thomas Keith, who had been most successful in their laparotomies, and who regard antiseptics as not only useless but pernicious; that their use adds a small percentage to the fatality of this operation.

Dr. Post, however, was disposed to believe in the efficacy of antiseptic dressings in addition to cleanliness. There was no doubt that great improvement had been made within the last few years in the surgical treatment of wounds, but whether the success was due to antiseptics more than to cleanliness might still be an unanswered question.

DR. W. GILL WYLIE had nothing special to add to what had been stated in the paper. It might be remarked, however, that previous to three or four years ago, ovariotomies were not performed in Bellevue Hospital. The introduction of antiseptics had done good, and although it was probable that their use had been at times carried too far, still, if the methods of Keith and Tait were followed out, it would be found that if they did not use antiseptics they applied, besides cleanliness, such dressings as insured protection against whatever influences or agents might be in the air, and really employed a Lister dressing. Dr. Wylie used antiseptics as a supplement to cleanliness.

Many of the reasons formerly given why Bellevue Hospital should be removed had been rendered powerless by the introduction of cleanliness and antiseptic dressings, but none of us knew what surgical cleanliness was until Lister told us.

DR. F. V. WHITE referred to one successful amputation of the thigh while he was interne in Bellevue. He also asked Dr. Smith whether or not bony union took place in the cases in which the fragments of fractured patella were wired together.

DR. W. M. CARPENTER mentioned the notable disappearance of specimens of surgical kidney, and other grave lesions following surgical operations, during the last few years of his service as Assistant Curator to the Hospital.

DR. SMITH thought it probable that antiseptic surgery had led to extreme cleanliness. He also believed that those who were ridiculing antiseptics were doing great harm, and considered that the care with which Mr. Tait prepared his sponges showed that he did not operate as used to be done in Bellevue. It was very probable that Tait secured thorough cleanliness by means of hot water and other measures, and the employment of experts who devoted themselves to his work.

With regard to the kind of union after fracture of the patella, Dr. Smith had wired the fragments together in *seven* cases, and the result had seemed to be union by bone.

THE ERNST KRACKOWIZER PRIZE-ESSAY FUND.

The object for which a society of laymen and medical gentlemen was organized having ceased to exist, there remained the sum of $1,155, which, through Mr. Paul Baluff, Chairman, and Dr. Herman Guleke, Secretary, was presented to the Academy, with the special provision that the accumulated interest therefrom should be available every third year as an award for an essay, the standard and merit of which should be determined by a committee composed of the Presidents of the Academy, of Bellevue Hospital Medical College, of the Medical Department of the University of the City of New York, and of the College of Physicians and Surgeons, Medical Department of Columbia College, unless the Academy should decide otherwise. This sum shall be registered on the property returns of the Academy as the "Ernst Krackowizer Prize Fund."

On motion by DR. F. V. WHITE, and seconded by DR. F. A. CASTLE, the presentation was accepted with the thanks of the Academy, and referred to the Council with power.

DR. STEPHEN SMITH moved that a committee be appointed by the President, and that the President and the Recording Secretary of the Academy be the Chairman and Secretary of the Committee, to report at some future date their conclusions with reference to amendments to the Constitution and by-laws looking toward more complete work in the sections. Carried, and the President was empowered to enlarge the committee to make it correspond with the number of sections.

The Academy then adjourned.

TUBERCULOSIS AND VACCINATION.—Dr. Acker states (*Deutsche Medicinal Zeitung*, No. 29, 1885) that vaccine lymph taken from tuberculous individuals is entirely free from bacilli, and that consequently vaccination with pure lymph unmixed with blood cannot transmit tuberculosis. And the author even asserts that did the lymph contain tubercle bacilli there would be no danger of inoculation, for recent experiments have shown that tuberculosis cannot become developed in superficial cutaneous wounds.

A RUSSIAN CHOLERA COMMISSION.—The Russian Government has sent three physicians to Spain to study the cholera, and Ferrán's method of preventive inoculation. The commission is composed of Drs. Manassein, Rapcheffski, and Kurloff.

Correspondence.

OUR LONDON LETTER.

(From our Special Correspondent.)

THE PROVINCIAL SCHOOLS OF MEDICINE—MR. JONATHAN HUTCHINSON AT LEEDS—HIS VIEWS OF EDUCATION—OF KNOWLEDGE, WISDOM, HEREDITY, ETC.—SHEFFIELD SCHOOL AND FIRTH COLLEGE—MR. BRADLEY AT LIVERPOOL—"STUDY OF UNIVERSALITY"—THE SHADOW OF THE DEATH OF MR. WALKER—THE DEATH OF DR. JAMES RUSSELL—THE PRESENTATION ON HIS DEATH-BED—THE LATE DR. S. MONCKTON.

LONDON, October 10, 1885.

LAST week I gave you some notes about the opening of the London schools. I may supplement them by some remarks as to the same event in the provinces, for in England the provincial schools also open on October 1st, although in Scotland and Ireland they remain in vacation for another month.

As almost a London event I may put the Leeds school first, for there my versatile friend, Mr. Jonathan Hutchinson, F.R.S., delivered the introductory, and took for his subject "The Uses of Knowledge." Of course he was listened to with attention—he always is, mainly, perhaps, because he always has something to say. Then he is a Yorkshireman, and was therefore at home among his brethren, on a visit, too, after years of metropolitan success, and Yorkshire is hospitable and reverences success. Mr. Hutchinson's success has been steady as well as rapid. Few of our London consultants have advanced with more even, constant steps, and all along with the good wishes of his brethren. His secret many would like to learn, though it is no secret; he has merely done what was before him with steadfast, earnest purpose, without show or any attempt at brilliancy. He has proved himself prepared for whatever duty might come to him, and capable of advising on almost any case. He has cultivated more than one specialty—indeed so many, that he is a sort of general specialist, a thoroughly "good all-round man," with extra points in several departments. This is largely the result of industry. The mere reading he must have done would alarm many a man who cannot be called idle. His solidity is well exemplified in the operating-room. He never does anything to excite attention, still less enthusiasm, never seeks the applause of colleagues or students, but does his work cautiously, yet well, as if all he thought of was to do what was necessary for the patient with the least fuss or flurry. Some of our younger surgeons, some even brought up at his feet, would do well to copy him in this.

But about his address—well, according to the Leeds papers, I judge it capable of exciting discussion, even opposition. I could object to much myself, but can keep my objections to talk over with him—at any rate the chief. He urged the limitation of our memory, and held that it would be good to remember this: We can only store away, he said, a certain quantity, and the pressing of more in must force something out. Is the mind, then, like a travelling trunk, its capacity fixed beforehand? The doctrine would certainly tend to lessen the burdens of the student. Surely, however, it is expansible, or what a capacity it must naturally present—as we see in Mr. Hutchinson's own case! Whatever we do, he says, we soon reach the limit, and must then choose what to retain and what to commit to oblivion. Hear this, you examining boards, that are always adding something to the subjects which men are to cram up.

What to choose, then? Special things are to most of us in the way of duty, he says; beyond these is a range for choice. So a surgeon must ever retain what is essential for practice. That is first. The range of other knowledge acquired may make him a well-informed man.

But the uses of knowledge—and here, if accurately reported, he became a little less lucid than usual, though I have previously heard some mystical remarks of this kind from his lips. The noblest faculty, he says, is love, and this is not an abstract quality, springing up causelessly in our hearts, but the result of hereditarily transmitted faculties, by which we take cognizance of beauty. No doubt the young men who heard this thought they learned something. Let them tell it to their sweethearts, and I doubt if it produces more impression than a statement of the chemical composition of tears, when offered to show the futility of grief.

And Mr. H.'s favorite notion of heredity is applied also to wisdom, which, he says, cannot exist apart from the matured results of hereditarily transmitted knowledge; and to cap this handy assertion, he added, "No ignorant person, born of ignorant predecessors, can possibly be wise." I fancy few communities will indorse this doctrine. Heredity may be a factor in many things, but is it not a proverb that the sons and grandsons of wise men seldom evince a tithe of their wisdom?

Descending to matters of less importance, the kind of knowledge affecting education, Mr. Hutchinson would banish Greek and Latin from the boys' schools, and deliver our girls from the attempt to learn French, and some very smart things he said on this subject. Geology and poetry are better than French and German for an English boy or girl to study, and far better for a man or woman to remember; and as memory is limited, why burden it with languages, which are likely to be of little use? Audacious as this view will seem to many, there is something to be said for it in these days, when knowledge is so multiplied that the text-books of a student are more extensive than the library of the ancient sage.

Mr. Hutchinson would, as a counterpart to the dismissal of philology in order to make room for science, have all technical terms reduced to English, and compel the writers to find equivalents which every English reader could understand for the strange syllables which meet them on every page of botanical or geological manuals. He thinks an enterprising publisher who produced such books would succeed. Let us hope the hint will be taken, for why should the language of flowers be the most jaw-breaking combination of unnaturally conjoined syllables? But how can such a thing ever come if wisdom is only the result of hereditarily transmitted knowledge? Gamopetalous, monœcious, syncarpous, and so on, do not approach more closely to English than when first coined, and it is difficult to believe that generations of cacophonous syllables will hereditarily transmit euphonious language.

At Sheffield, Mr. Pye-Smith congratulated his audience on the prospect of incorporating the medical school with Firth College, which is fully equipped in all the departments of science. About £2,000 is required for new buildings and ought at once to be forthcoming, for Sheffield manufacturers are many of them rich, and examples of liberality have not been wanting among them. He appealed for public support to the hospitals, and deprecated the objections often made to *post-mortem* examinations, which were of so much value in promoting knowledge useful to the living. He also offered the students good advice in the pursuit of their work, and some remarks to stimulate their devotion to duty.

At Liverpool, Professor Bradley delivered the address, and took for his subject "The Study of Universality," as Bacon in his day called it when he complained of its neglect. Now that his college was formally associated with the new Victoria University, this subject was appropriate and would commend itself to many. Mr. Bradley would apparently like to see students more or less associated with other Faculties in the University than medicine, and plenty of people will agree with him. It is right, however, to remember that the medical curriculum is so overcrowded, and our students so severely tested by examination that they have no time to cultivate other branches of knowledge. It is unfortunate for

learning that the new Victoria University has followed to so great an extent the evil example of the London so-called University, which has done so much to sever medicine from learning. When men are compelled to cram with useless details in such quantity that only those with excellent memories need hope to pass, how can they be expected to look at other subjects?

I know men who have not dared to look at a book or picture or listen to a concert, and who have also absolutely restricted their professional reading to the books of their examiners and such other manuals as were reputed to "tell at exam." When remonstrated with on the narrowing effect on their minds, they would say it "is useless to think of anything but learning by rote until after the degree, then poetry or literature may perhaps be enjoyed." Could anything be worse for the profession? The London University turns out men who are ignorant of everything but a few favorite books and the fads of certain teachers, and who have to begin to acquire general knowledge after taking their degree. Could there be a greater condemnation of any university?

The opening day at Liverpool was saddened by missing from his place Mr. Walker, the ophthalmic surgeon, whose death I reported in my last letter.

Birmingham, too, had a sad opening, for Dr. Russell, who had lately retired from the teaching staff, lay on his death-bed. His pupils had prepared an address expressing their gratitude and affection toward him, but he was too ill for it to be read to him at length. He was, however, told the gist of it, and that over a hundred signatures were appended. He dictated a message of thanks—his last public effort. He died on October 5th, lamented by all Birmingham, of which town he was a native, after an honorable career which leaves a noble example.

Touching of deaths, I must mention another, Dr. Stephen Monckton, of Maidstone, who for years has been a prominent physician, known in London also, but most admired in his Kentish home, where he wielded enormous influence in political and social circles without losing the confidence of the profession or the public, as so many are apt to do if they display any but the faintest interest in subjects outside their daily work. Dr. Monckton was a man of broad sympathies, earnest purpose, ardent zeal, altogether a man to admire, as well as a physician to trust. He died on September 30th, aged sixty-one, of ulcerative endocarditis.

OUR PARIS LETTER.

(From our Special Correspondent.)

THE DEATH OF PROFESSOR CHARLES ROBIN—THE RÔLE PLAYED BY NERVOUS HEREDITY IN LOCOMOTOR ATAXY—OCULAR TROUBLES IN LOCOMOTOR ATAXY—THE ESTABLISHMENT OF AN HISTOLOGICAL LABORATORY FOR THE EXAMINATION OF MEATS BY ELECTRIC LIGHT.

PARIS, October 9, 1885.

DR. CHARLES ROBIN, Professor of Histology at the Faculty of Medicine of Paris, died at Josseron, in the Ain, whither he had gone for the summer holidays. On Monday night, the 5th inst., he had an attack of cerebral apoplexy, to which he succumbed in a few hours in the sixty-fifth year of his age. The deceased gentleman took his degree in 1845, and was shortly after appointed Professor of Histology, in which branch he eminently excelled, and consequently he was dreaded as an examiner. He was a Senator, and Member of the Institute and of the Academy of Medicine. He has not published many works, but a dictionary that he brought out some years ago in conjunction with the late M. Littré is still considered the best standard work of its kind. It is a dictionary of medicines, of surgery, pharmacy, of the accessory sciences, and of the veterinary art. In fact, it is a small encyclopædia in itself—nothing has been published like it in any other language. All it treats of is in one volume, and it will probably be consulted for many a generation to come.

In a memoir by MM. Landouzy and Ballet on the rôle played by nervous heredity in locomotor ataxy, and for which the authors were awarded a prize at the Academy of Medicine, it is shown that in 138 cases of the malady it was found that in 61 cases it could not be traced to any particular cause or to causes other than syphilis and heredity; 36 cases of heredity, 35 of syphilis, plus 7 cases of syphilis and heredity combined, and 3 cases of probable syphilis and heredity. It will be seen that these statistics notably differ from those which have been cited in favor of the predominance of syphilis as a cause of locomotor ataxy (93 to 103, Fournier; 38 to 100, Erb). These etiological researches are enveloped in difficulties; nevertheless, the results obtained by the authors are very interesting. It will be seen that the number of ataxic subjects by heredity surpasses that of those by syphilis. Whence one is led to conclude that the part of the predominant influence in the pathogeny of tabes may be referred to heredity, syphilis playing a secondary part. The authors do not depend on statistics alone to prove the correctness of their thesis; they adduce arguments of another order in favor of the hereditary origin of locomotor ataxy; such, for instance, among a number of other observations that may be found in other works, the case reported by Dr. Carré, of a family in which, during three generations, there were not less than 18 tabetic subjects, grandmother, mother, 7 out of 12 sons, then 8 near relations, all of whom were affected with tabes. Other pathological coincidences have also been pretty frequently noticed in ataxic subjects, such, for instance, as the combination in a patient suffering from progressive locomotor ataxy, and of another nervous affection, hysteria, vesania, or some mental affection; the frequent coincidence of tabetic symptoms and psychic troubles of general paralysis; divers neuropathic manifestations, epilepsy, hypochondria, lypemania, the delirium of persecution. The conclusion arrived at by MM. Landouzy and Ballet from their researches is that the nervous system in ataxic subjects is affected with some defect which predisposes it to troubles the most varied, a fact which Charcot had already noticed in his lectures. The facts and arguments brought together in their work tend to this demonstration of hereditary predisposition, which, according to the authors, is the predominating, all-sufficient, and perhaps necessary cause of tabes, the other causes, such as cold, excesses, syphilis, etc., intervening as so many accessory or occasional causes.

In connection with this subject I may mention that Dr. Galezowski, a well-known ophthalmologist, in a clinical lecture on ocular troubles in locomotor ataxy, makes the following remarks: "I fully agree with Professor Fournier as to the frequency of syphilis in locomotor ataxy, and believe with him that nine times out of ten the disease is syphilitic in its essence. My opinion is based on a considerable number of observations where the presence of syphilis was not disputable; it is supported particularly by the good effects of the treatment applied."

The Municipal Council of Paris has resolved to establish an histological laboratory at the "Halles Centrales," or Central Market, for the examination of butchers' and other viands thereat sold. It is to be placed under the direction of a veterinary surgeon who will also be well up in micrography. It will form at the same time a practical and theoretical school, serving for the analysis of doubtful meats and for the instruction of inspectors not familiar with the microscope.

In a report by M. Lamouroux, a Municipal Councillor pointed out the necessity for substituting the electric light for that of gas in the pavilion allotted to butchers, as it has been found that microscopic analysis is impossible with the gaslight, which does not enable one to distinguish the proper colors. This renders the tasks of

the inspectors very difficult, as the butchers, who are well acquainted with this inconvenience of the gaslight, take advantage of this circumstance to sell their bad meat at night instead of by day.

LACTUCA GRAVEOLENS IN DROPSY.

To the Editor of The Medical Record.

Sir: In the experimental history of the Materia Medica of Dr. William Lewis, third edition, edited by the celebrated physician and poet Dr. John Aiken, in 1784, or just one hundred years ago, we read, page 375, that lactuca graveolens, vel sylvestris, vel odorosa, vel virosa, or strong-scented, stinking lettuce, by some erroneously supposed to be the wild lettuce, was highly prized by the celebrated Dr. Collin, of Vienna, who wrote a tract recommending it in the cure of dropsies. The preparation he used is an extract from the expressed juice, first sufficiently clarified, then evaporated by very gentle heat. This comes near our fluid extracts, and is better than those made from old dried plants. He begins with small doses, but in dropsies of long standing, originating from visceral obstructions, notably perhaps of the kidneys and portal system, he rises to the quantity of from one to three drachms in twenty-four hours. He has constantly found it a mild remedy, agreeing perfectly with the stomach, and usually keeping the bowels open, but without exciting purging. It also seldom failed of proving powerfully diuretic, and at the same time mildly diaphoretic. The patients' excessive thirst was totally extinguished by its use, but all were allowed to drink freely of diluting fluids during the course. Dr. Collin asserts that out of twenty-four dropsical cases all but one were cured by this medicine, a degree of success which, Dr. Lewis says, certainly entitles it to the further notice of the medical faculty.

Did Dr. Collin tell a whopper here, or rather twenty-three whoppers, or perhaps less, or has a valuable remedy been long neglected? Stephenson and Churchill, in their "Medical Botany," London, 1831, vol. i., article 12, say they consider lactuca virosa one of the most valuable native plants. They quote Dr. Collin and say in a dropsical case that lately came under their care it certainly produced a salutary action on the kidneys, and procured quiet sleep. They also ascertained to their own satisfaction that it possesses another most important virtue, viz., that of *reducing the velocity of the pulse*, at the same time that *it increases its tone*; and so remarkably efficiently did it act in one patient that three small doses of the tincture depressed the pulse from 130 to less than 70, accompanied by intermissions. Unlike digitalis, its effects on the brain were scarcely felt.

Pereira says the milky juice of L. virosa furnishes from fifty to fifty-five per cent. of lactucarium, while that of L. sativa only gives up seventeen to twenty-three per cent. François says it allays pain, diminishes the rapidity of the circulation, reduces body-heat, and favors sleep. Buchner says the same, and Dr. Bigelow that it promotes the secretions from the kidneys and skin. Dr. Seidel, a homœopathic physician, experimented on fifteen healthy persons with considerable doses of the tincture and extract. First it caused a sense of heat in the stomach, followed by coolness. Then contraction in the stomach or heart, with real præcordial anguish; the thorax seemed compressed, with a longing for the open air and frequent yawnings. Then the head became anæmic, or, at least, confused and a little giddy, with some buzzing in the depths of the ears. Then gurglings in the stomach and bowels, with eructations and flatulence, some mucus in the throat, with cough, followed by loose pappy stools, while the urine became considerably increased. The pulse was less frequent for several days. Dr. Seidel thought it suited to some cases of hepatic, cardiac, pulmonary, and renal congestion.

John C. Peters, M.D.

New Instruments.

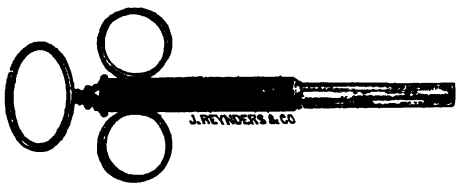
A POWDER INTRODUCER.

By F. F. C. VAN ALLEN, M.D.,

Albany, N. Y.

Where it is desired to introduce a quantitv of absorptive powder into the external auditory canal in the treatment of purulent otitis, a powder-blower is certainly an unsatisfactory apparatus to use. After using various contrivances I had an instrument made for me, and after employing it both in private and hospital practice for more than a year, I can say that it is very satisfactory.

This powder introducer consists of a small glass tube suitably connected with a piston. To charge it, the



piston is withdrawn to the full extent, and the tubular end is plunged into a shallow, wide-mouthed bottle containing the powder, which readily crowds up into the tube, the air escaping from a vent-hole at the upper portion. Thus charged the instrument is introduced a short distance within the meatus, and powder pushed into the canal by pressing the piston. By varying manipulation the powder can be packed firmly or loosely.

Army and Navy News.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from October 11, 1885, *to October* 17, 1885.

Irwin, B. J. D., Lieutenant-Colonel and Assistant Medical Purveyor. Ordered from Department of Arizona to New York City, for temporary duty in charge of Medical Purveying Depot at that place, relieving Captain Henry Johnson, Medical Storekeeper. S. O. 233, A. G. O., October 10, 1885.

Morris, Edward R., First Lieutenant and Assistant Surgeon (recently appointed). Ordered for duty in Department of the Missouri. S. O. 233, A. G. O., October 10, 1885.

Official List of Changes in the Medical Corps of the United States Navy for the week ending October 17, 1885.

Baldwin, L. B., Passed Assistant Surgeon. Detached from Naval Hospital, Philadelphia, and ordered to Navy Yard, Mare Island.

Dickinson, D., Surgeon. Detached from Naval Hospital, Mare Island, and ordered to Training Ship Portsmouth as relief to Surgeon A. M. Moore.

Moore, A. M., Surgeon. Detached from Training Ship Portsmouth and await orders.

Shafer, Joseph, Assistant Surgeon. Detached from Receiving Ship St. Louis and ordered to Naval Hospital, Philadelphia, as relief of Passed Assistant Surgeon Baldwin.

Hester, F. A., Assistant Surgeon. Detached from U. S. S. Minnesota, and ordered to the Tennessee, as relief of Passed Assistant Surgeon Nelson H. Drake.

Drake, Nelson H., Passed Assistant Surgeon. Detached from the Tennessee, 31st inst., and await orders.

Medical Items.

Female Physicians for India.—There has just been established, under the auspices of Lady Dufferin, as lady president, a National Association for Supplying Female Medical Aid to Women in India. The object is to supply in hospital wards and within private houses that medical care and advice which respectable native women will only accept from their own sex. The association will provide scholarships for women under tuition, and will procure from Europe and America a sufficient number of skilled female medical teachers. The support and sympathy of influential native princes have already been promised, and aid from England and India is invited.

The Berlin Medical Society is house-hunting, and a very unsatisfactory task it finds it. It has recently held two trial sessions in different buildings, but has not selected either of them, and it appears not improbable when the summer vacation is over that it will find itself without a local habitation. The society numbers over 400 members, and it seems strange that it has not a building of its own.

Moss as a Surgical Dressing.—For some months past moss has been employed as a surgical dressing in the Teaching Hospital in St. Petersburg; it costs 50 kopecks a pood (25 cents for 36 pounds). The results have been very satisfactory.

A New Mercurial Ointment.—M. Ivan proposes to replace lard by soft-soap in preparing mercurial ointments (*Le Progrès Médical*). When one part by weight of soft-soap (as nearly neutral as possible) is rubbed up with three parts of mercury it is seen that the extinction of the mercury occurs as completely as with lard, and much more rapidly. The mercurial soap will keep indefinitely and does not become softened by heat, but retains its natural firmness in all temperatures. It is of itself unirritating, and is easily removed by washing. Mercurial soap would thus seem to be preferable in many ways to the ointment.

The Inheritance of Artificial Deformities.—In the course of a discussion at a meeting of the Société de Chirurgie of Paris, M. Magitot stated that for the past fifteen years, in the laboratory of the Faculté de Médecine, he had been cutting off the tails of all the rats in one descending line. But now, at the end of so long a time and after the deformity had been produced in so many generations, the rats were born with just as long tails as ever.

The Feuilleton of one of the Parisian Medical Journals consists now of a literal translation of the *Pall Mall Gazette* exposures of London vice. The tale is continued from week to week, and the feuilleton occupies very nearly as much space as does the scientific matter.

The Treatment of Pityriasis Versicolor.—Dr. W. Thornton Parker, of Newport, R. I., writes: "I notice in to-day's Record an item concerning the treatment of pityriasis versicolor, in which sulphur ointment and nitric acid ointment and the corrosive sublimate solution are recommended. All these may be good remedies, but to me they seem needlessly harsh. I find it sufficient to direct my patient to take a warm bath or sponge bath before going to bed. After this I direct that a cake of soap, common bar soap, or better still, Frank Siddall's soap, be well moistened by holding it in warm water for a moment, and then rubbed on the spot, in fact *well rubbed in*, until the soap becomes dry. The night flannel is then put on, and a cotton night shirt. In the morning the dried soap is to be *removed* by the sponge bath. The bath must be thorough, and every vestige of the soap removed. For the day wear a clean flannel every morning and a clean flannel every night until the discoloration has disappeared. The flannels must be boiled and well washed before using again. This simple treatment, carried out faithfully for a longer or shorter time, according to the extent and persistency of the discoloration, will be found successful. The application generally prescribed will not prove satisfactory in many cases, unless this plan is associated with the treatment. I am quite certain that in treating this affection harsh methods are entirely superfluous."

Malingerers in Galicia.—According to Filleabaum, the simulation of diseases has been reduced to a fine art among the conscripts of Galicia. The particular form of mutilation varies according to the different districts, in one place prolapse of the rectum being the favorite, while in another the recruits prefer to cut off their fingers. One plan which is very popular is to produce corneal opacities by a sort of tattooing process, and in one case the author observed a leech-bite on the cornea, a method that had been employed by over thirty men coming from Kars. Nystagmus is often simulated, but the deception is made evident by irregularity in the rhythm during a prolonged examination. The author saw twenty cases of artificial subluxation of the shoulder. The arm was abducted, the head of the humerus being displaced toward the axilla and fixed so that the scapula followed the movements of the arm. The muscles were strongly contracted, and the inner edge of the scapula was raised as in paralysis of the serratus magnus. A very moderate pressure was sufficient to reduce the dislocation, but it was at once reproduced by a sharp contraction of the muscles. Emaciation was caused by fasting, purgatives, and abstention from sleep. Twenty young Jews from the district of Zolkien were sent to the hospital for this cause, but refused to eat anything but bread, saying that the food was not prepared according to their rites, and it was found necessary at last to give them their discharge.—*Journal de Médécine et de Chirurgie Pratiques.*

Explosive Physic.—A list has just been published, in the *Union Pharmaceutique*, of accidents which have recently occurred during the preparation or carriage of explosive substances used in medicine. At Strasbourg, a chemist's assistant was changing some lycopodium-powder from one bottle to another; the particles that escaped mixed with the air, a jet of gas was burning, and a slight explosion occurred; the frightened assistant dropped the jar containing the lycopodium, the room was at once filled with the powder, and a violent explosion took place. Chlorate and permanganate of potash are also dangerous. M. Meyet has stated that a tooth-powder composed of chlorate of potash and cachou has been known to explode in the mouth of a person engaged in brushing his teeth. A druggist who dried some hypophosphite of lime in a receptacle containing sand was killed by its explosion. Oxalate and citrate of lime are also explosive, but only at a high temperature. Pills of permanganate of potash have been known to explode spontaneously. A mixture of perchloride of iron and glycerine exploded in the pocket of a patient who carried it. An eminent chemist at Paris prepared ozone with powders composed of equal parts of peroxide of manganese, permanganate of potassium, and pulverized oxalic acid; he took every recognized precaution, and the mixture was corked up in a bottle; a few minutes afterward an explosion took place, and the bottle was reduced to atoms.—*British Medical Journal*, August 1, 1885.

The Practical Results of Sanitation.—The effect of sanitary improvements upon the health of a community is well illustrated in the case of Merthyr Tydvil in Wales. In this place, during the last thirty years, sanitary improvements have lessened the death-rate from 332 to 232 per 10,000, while the average age of death has been increased from seventeen and a half to twenty-seven years.—*The Sanitary World.*

WHAT THE CHINESE EAT.—That "one-half of the world does not know how the other half lives," is as true of eating as of anything else. Many of us, no doubt, have experienced a pharisaical satisfaction in contrasting the dainties which tickle our palates with the ragoûts, fricassées, and consommes of dog, cat, and rat, which we have believed to be the choicest tidbits of the heathen Chinee. It now appears that these animals form no part of a Chinese menu, except in the case of some cranky individuals who are found among the Celestials as well as among the Yankees. Now and then a Chinese woman resorts to rat-flesh to restore her fallen hair, or a man eats cat-steak to renew his blood, and persons too poor to buy even "bread and cheese," eat dog-soup rather than starve. But a gentleman who has lived fifteen years in China, and associated with all classes of people, avers that he has never seen cat, dog, or rat-meat served in any form whatever. "What, then, do the Chinese eat?" was asked of a Chinese gentleman, and *Wide-awake* gives his reply as follows: "Chinese gardens are prodigal of vegetables; our ponds, rivers, and lakes swarm with fish; our farm-yards are crowded with pigs, land-fowls, ducks, and geese; our fields are gilded three times every year with ripening rice. In some sections of the empire wheat and barley are produced; but rice is our usual substitute for bread. These articles make up the every-day food of the people. But there are certain things unknown to your tables that are considered great delicacies by everybody, one of which is edible birds' nests. Another is shark's fins. The Chinese do not keep many cows, and it is true that beef is not esteemed as good as pork, and that many will not eat beef on account of religious scruples. Milk, butter, and cheese are almost unknown articles of diet. The Chinese think it is robbing the calves to take milk from the cows."

A SURE CURE FOR CHOLERA.—The Spanish medical journals are publishing a letter addressed to them by a French physician, Dr. Laubie, who claims to have discovered something which is "really a sovereign remedy against cholera." It is, he says, very rapid in its action, an improvement being experienced within half an hour, and the course of the disease being thenceforth a rapid one toward recovery. After thus raising the expectations of his readers to the highest pitch, he forgets to state what his specific is. It is a peculiarity of "sure-cure" doctors the world over to keep the nature of their remedies secret.

GENIUS OR MADNESS?—The *Medical Times* gives the following particulars about Victor Hugo: His uncle died insane; his brother, Charles Hugo, who at an early age gave promise of great literary talent, became insane before twenty, and spent the latter part of his years in a hopeless state of dementia; and one of the poet's daughters, still living, is the inmate of a "maison de santé." That in a family thus tainted with insanity a man of immense genius should arise is only another instance of that close hereditary connection between mental disease and highly intellectual powers which Moreau de Tours so forcibly pointed out in his celebrated book, "La Psychologie Morbide;" but any impartial reader will find in many of Hugo's best writings a large number of passages which could only have been conceived by a diseased imagination, and which bear the indelible stamp of madness. In this respect the French poet widely differs from his great prototype, Shakespeare, who in the wildest flights of his poetical phantasy still remains faithful to sound common sense. The mind of Shakespeare was evidently a healthy one; that of Hugo was not; and if some future Plutarch attempts to strike a parallel between these two great literary giants, he will do well to keep this fundamental difference in view. It may seem ambitious to compare Hugo to Shakespeare, but in this city and at the present day most people seem inclined to place the modern poet above the older bard, an exaggeration which time will doubtless dispel. Yet, as regards the conduct of his private affairs, no man could excel Victor Hugo in that shrewdness which persons "not quite right about the head" so often exhibit. No banker could more carefully have managed his fortune, no politician could more tenderly have nursed his popularity; and the man who left a fortune of more than two hundred thousand pounds sterling was the idol of a jealous democracy, while the politician who played at fast and loose with all parties was buried in the midst of universal applause. Such an instance of great "wit to madness near allied" the annals of the civilized world have never hitherto placed on record for the edification of posterity.

AN ILLINOIS "TEN-YEAR MAN."—At Carbondale, Ill., there once lived a pretentious old quack—"a ten-year man"—by the name of O'Haven. One day he lounged into a store where were several of the more reputable physicians of the town and a literary man. The literary man knew of the ignorance of the quack and concluded to expose it, and, to do so, inveigled the pretender into a scientific conversation. Turning to one of the more reputable physicians present, our literary friend, with a significant wink, began: "Dr. R., what do you think of the controversy in the *Lancet?*" Dr. R.: "Well, the fact is, I haven't made up my mind about it." Literary Man: "But, doctor, don't you think it strange that so important a question as the position of the liver should not have been settled before this? I have always thought that there was no doubt but that the liver was situated above the diaphragm." Dr. R. (taking the hint): "Well, it's not so strange after all. I've seen cases in which it was hard to tell. I confess, however, I have been of the opinion that in most cases, at least, it was below the diaphragm." L. M.: "The question is certainly an important one, or the London *Lancet* would not spend so much time and space discussing it. Ah, there is Dr. O'Haven! Doctor, you have had great experience; what is your opinion on the question that appears to be vexing the professional mind?" Dr. O'H. ("ten-year man"): "Well, sir, that is a question to which I have given a great deal of attention. From my long study and extensive observation I have, however, been able to settle the matter beyond all dispute. The liver, sir, is situated *half above and half below the diaphragm!*"—*Cincinnati Medical Journal*, August, 1885.

AQUA CAMPHOR, NOT TINCT. CAMPHOR.—A correspondent says: "There is a serious error in Milner Fothergill's paper, p. 227, August 29th issue. The writer means aqua camphor, undoubtedly, as an ounce of tinct. camphor at one dose would be fatal, and a drachm is sufficient to cause in most people violent and dangerous convulsions."

WOUNDS OF THE HEART NOT INSTANTLY FATAL.—Dr. Charles H. Cockey, of Baltimore, Md., writes: "In regard to wounds of the heart, Elwell, in 'Malpractice and Medical Evidence,' page 568 (edition 1866), says: 'A British soldier survived for thirteen days with a musket-ball in his heart. In a case tried in Glasgow in 1819, the medical evidence showed that the auricles and part of the aorta next the heart were destroyed by slugs and brass nails with which the piece was charged, and in that case he must have dropped down dead the moment he received the shot. But the evidence showed the body to have been found some distance from the door where the prisoner claimed to have shot him, as he was entering his house by force, as a stream of blood was found from the door to the place where the body lay. It was determined that the prisoner did not run into the street and shoot the deceased, but that the deceased did run from the house to the spot where he lay, though shot in the manner described. The prisoner was discharged.' In the *New York Medical Journal*, vol. xxviii., December, 1878, page 634, Dr. V. P. Gibney relates the following history as sent to him by Dr. F. M. Holly, of Greenwich, Conn.: 'A man, aged eighteen, was accidentally shot,

July 7, 1878, by a Smith & Wesson revolver, calibre 22. He was seen by Dr. Mead an hour after the injury, and was then in a state of partial collapse, from which he subsequently rallied. He had no remembrance of the shooting, or of having fallen into a brook near to which he was sitting. He recovered quickly without any unfavorable symptoms, except slight dyspnœa and slight pleuritic pain on both sides for a few days, and at the expiration of a fortnight was sufficiently well to resume work. He was engaged as a farm-hand, and was able to do his usual duties till August 30th, when, after a hearty breakfast, he went into the field, and was found, after twenty minutes, dead behind the plow. Upon examination a small cicatrix was seen near the left nipple, an inch and three quarters above and toward the median line. On opening the thorax, the left pleura and pericardium were found distended with serum and coagulated blood. A small cicatrix existed on the upper lobe of the left lung in line with the external cicatrix. Beneath, an opening one-fourth of an inch in diameter was found in the pericardium. . . . Opposite the opening in the pericardium, and on the anterior surface of the right ventricle, a small aneurismal sac, the size of a hazel-nut, was found ruptured. The walls of this sac were very thin, and a probe introduced in the rent passed into the ventricular cavity. The rupture of this aneurismal sac was the cause of the extravasation of blood into the pericardium and pleura with sudden death. . . . Dr. Gibney said that when he received the specimen, he opened the left ventricle and found the ball lying behind one of the pillars of the columnæ carneæ, above and to the left of the apex of the cavity. On a more careful examination, an opening was traced through the upper portion of the septum and contiguous semi-lunar valve, through the aorta itself, to the left auricle. All these openings were found on a line with the opening into the right ventricle.' . . . But undoubtedly the above cases are known to you."

Brutal Treatment of a Physician.—The following is an illustration of the sort of treatment to which physicians in the cholera districts bordering on the Mediterranean are exposed at the hands of the ignorant and frightened populace: At Puebla Larga, near Barcelona, a man died of cholera. The relatives told not a soul of what had happened, but, assembled in the front room of their cabin, awaited the arrival of the doctor on his daily round of visits, and when he came asked him quietly, as though all was well, to step in and see his patient. What was his astonishment on drawing near the bed to find that it held a corpse, and, on turning around, to see himself surrounded by the relatives, whose appearance had now become most threatening. They demanded of him what right he had to take their money without curing his patient, and called him a murderer, saying that this was the third person he had deliberately killed in one week. Then the wife of the dead man gathered all the medicines, pills, liniments, disinfectants, and the rest, which the unlucky physician had prescribed, and while the others held him down and forced open his mouth, she emptied the contents of all the boxes and bottles down his throat. For twenty minutes this man was held down while the fiend of a woman poured carbolic-acid solutions, hot liniments, drugs, one after the other, into her victim's mouth. An hour later he was dead. And in two days his father was also dead from the shock which the news of his son's fate gave him.

The American Medical Missionary Society was organized last March, with headquarters in Chicago. The objects of the Society are to assist young men desirous of becoming medical missionaries in obtaining a thorough education, and in qualifying themselves practically for the work which they will be called upon to do; to establish medical mission stations and dispensaries abroad; to supply medical missionaries with the necessary medicines and instruments, etc. The constitution is modelled upon that of a similar society which has been in existence for some time in Edinburgh. The objects of this society are laudable, and we wish the promoters of the work every success. But we cannot approve of some of the statements set forth by the Society in its "Plea for Medical Missions." One of these is, that in some parts of China, in case of delayed child-birth, if the child is not tempted to come into the outer world by a bait of rice spread upon the floor, "the woman is placed upon the floor and actually jumped upon." It may have happened some time or other that a Chinese woman was jumped upon while in labor, just as it has happened in our own happy land that women in childbirth have been jumped upon, but that such is an established custom in China any more than it is in America we know on excellent authority not to be the case. And the American Medical Missionary Society, or any other Missionary Society, will do no good and convert no heathen by giving circulation to such old wives' fables. However, we hope the Society, in spite of its "plea," will gain many recruits for medical work in uncivilized lands, for although the Chinese are not brutes by nature, they are lamentably deficient in the knowledge of the treatment of disease, and well-educated physicians may accomplish much good among them. The Secretary's address is 206 Twenty-eighth Street, Chicago, Ill.

Iodoform and Carbolic Acid.—It is not uncommon to read in accounts of operations that the wound was covered with iodoform over which carbolized gauze was applied. This practice is said by Mosetig-Moorhof to be wrong, and he attributes to this mixing of iodoform with various antiseptic acids most of the ill effects which have been unjustly laid to the door of the pure iodoform.

Arseniate of Gold.—A correspondent of *La Crónica Médica*, of Valencia, writes that arseniate of gold, which has been said to be a therapeutic agent of no mean value, does not and cannot exist. In order to make it, he says, it would be necessary to combine the protoxide of gold, Au_2O, with arsenic acid, AsO_5. But as the protoxide resists the action of the strongest acids, it is to be inferred that arsenic acid cannot affect it, and it is therefore, he reasons, impossible to have an arseniate of gold, therapeutists to the contrary.

Bacteria in the Air.—M. de Parville has published a paper on the presence of bacteria in the air we breathe. He says that the proportion of bacteria in a cubic metre is 6 in sea air, 1 in the air of high mountains, 60 in the principal cabin of a ship at sea, 200 in the air at the top of the Pantheon in Paris, 360 in the Rue de Rivoli of Paris, 6,000 in the Parisian sewers, 36,000 in old Parisian houses, 40,000 in the new hospital of the Hôtel Dieu of Paris, and 79,000 in the old hospital of Pitié in Paris. In Ryder Street, St. James's, London, a cubic metre of air contains only 240 bacteria, whereas in the Rue de Rivoli the same quantity of air contains 360. M. de Parville maintains that the superiority of London air as compared with Paris air is shown not only by the London air containing fewer bacteria, but also by the London rate of mortality being smaller. The greater purity, or less impurity of the air of London than that of Paris is accounted for by London being nearer to the sea, by its covering a larger extent of ground in proportion to the population, and by its houses being lower.

Tincture of Cobweb.—A correspondent writes that he has seen tincture of cobweb mentioned as of use in intermittent fever, but has been unable to find mention of any such tincture in any work to which he has access. He inquires where he can find a description of the manner of preparing it.

The Treatment of Mastitis.—Dr. J. A. Stilwell, of Brownstown, Ind., does not think there should be any controversy as to priority in treating mastitis by compression and rest. He has been treating it that way for ten years, and is sure it is not original with him, he having got the idea from an item in some medical journal.

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THE CHOICE OF REMEDIES.[1]

BY LAURENCE JOHNSON, M.D.,

NEW YORK.

TWENTY years ago there was much less faith in the efficacy of drugs in the treatment of diseases than there is to-day. One of our most prominent medical teachers and authors was wont to say in those days, that medicine was worth all the study given to it, if for nothing else than to enable the practitioner to make a diagnosis and prognosis. And this remark meant far more than appeared in the mere words uttered, for while the carefullest attention was paid to the diagnosis, clinical history, prognosis, and pathological characters of disease, the treatment was dwelt upon in such general terms as to mean anything or nothing. In other words, disease was considered principally from the natural history standpoint, and the catalogue of self-limited affections, with whose natural course the physician should not meddle, grew to uncomfortable proportions.

It is unnecessary to discuss the causes of this particular form of medical scepticism. That it existed cannot be questioned; and that its existence operated as an obstacle to the success of medical men educated with that lack of faith is equally capable of demonstration.

Naturally this heresy, like many others which for a time have ruffled the current of popular belief, did not long survive; but none the less, like some other heresies, it led a train of evils that long outlived the cause which produced them. A generation of medical men went forth to unlearn the false precepts of their teachers by the hard road of practical experience. One cannot but smile at the pitying contempt which the recent graduate of twenty years ago had for the simple faith of the old practitioner, who actually believed he could with drugs moderate the course of a pneumonia or cure a rheumatism. Yet such was the fact. This evil was, however, of a somewhat personal character and served chiefly to handicap the individual practitioner. The faith of the public remained unshaken, and he who ministered most successfully to the public was most substantially rewarded. In reviewing this subject in the light of personal experience, bearing in mind also the experience of professional friends with whose history I am familiar, I am fully convinced that to this sceptical training more than to any other one cause, are due many of the difficulties encountered in the early years of practice.

But other evils followed. If drugs were of doubtful efficacy, they could not be dispensed with. As already remarked, the public faith remained unshaken. The public, when sick, would have drugs. The theory of the self-limitation of disease, together with the apparent financial success of homœopathic practitioners, who, it was believed, administered pleasant-tasting or altogether tasteless medicines, while the disease ran its natural course toward recovery or death, pointed the politic road—that of making medicines as palatable as possible. And here seems to me to be the origin of one of the greatest evils from which we, as a profession, and our patients are suffering. From striving to render remedies more and still more palatable, efficiency has been largely sacrificed to elegance, and unless the tide be stemmed in some way the whirligig of time will again bring around an era of scepticism, based, however, upon a more substantial foundation. While I would not for a moment decry elegant pharmacy, within reasonable limits, I do most vehemently protest against its abuse, as at present so largely practised. Granting for the sake of argument that the proprietary pills, elixirs, and other compounds so largely used are compounded in accordance with their published formulæ, it cannot be doubted that their use begets in the physician a routine practice altogether at variance with the intelligent exercise of his calling; and the more skilful he may be in diagnosis, the greater is the contrast of his treatment. But in very many instances, at least, these preparations do not contain what is claimed for them. This has been shown again and again by chemical analysis.

Then how shall we be guided in the choice of remedies to use in the treatment of disease? This question seems to me easily answered in words though practically it requires more thought than has been our custom to bestow upon it. In the first place, we should bestow upon materia medica and therapeutics the same careful study as is commonly given to other departments of medicine; the same careful attention to details as, for instance, is exemplified in practical, and consequently, successful antiseptic surgery. Knowing first the remedies within our reach, not by name merely, but having a practical familiarity with them as individuals, an intelligent appreciation of their properties and effects, and of their comparative relations to each other, we shall be prepared to use them intelligently.

But one may say, this of itself would require the study of a lifetime. By no means. Let one but learn to distinguish the wheat from the chaff, and the materia medica will, so far as he is practically concerned, soon shrink to comparatively small proportions. Suppose the practical surgeon were to provide himself with all the instruments which have been used since surgery began to be practised, how many of them would he employ to-day?

Our materia medica is certainly anomalous. Every root and herb at any time employed, from Hippocrates down, must needs be included, together with almost every chemical which man's ingenuity or nature's fertility has provided. But how many of them are used? How many are worthy of use? Hardly a larger number than of surgical instruments. So while in surgery the antiquated are labelled and placed in museums, in materia medica the good and the bad, the useful and the demonstrably useless are left side by side as if for use together.

While everyone is familiar, at least in a general way, with the articles of standard worth of the materia medica, few have paid sufficient attention to the subject to enable them to pass a decided judgment upon the great number of useless and inefficient ones; and it is in behalf of these little known drugs that our credulity is most frequently appealed to by blind enthusiasts or designing speculators.

The properties, uses, and limitations of the minera preparations of the materia medica are pretty well recognized and understood. Take the preparations of iron, for instance. Everyone recognizes that though iron in any form is a tonic, yet there is a wide difference in the applicability of different preparations to different con-

[1] Read before the Section in Practice of Medicine of the New York Academy of Medicine, October 20, 1885.

ditions. The same may be said of mercury, potassium, or sodium. The facts regarding these minerals are firmly fixed in our minds, simply because the knowledge of them is classified. Now, if the same plan be pursued with drugs of vegetable origin, our knowledge of them would be just as readily available. In a general way, the individual plants comprising a great natural family, may be said to be as nearly related to each other as are the different chemical compounds of iron to each other. Take, for instance, the order Solanaceæ, which furnishes us, among others, belladonna, stramonium, hyoscyamus, and tobacco. In these four plants we have about all the efficiency that this order is likely to afford us in the way of narcotic agents. Each one of these has a sphere of applicability almost entirely its own. This fact being conceded, why waste time and energy in fruitless experimentation in search of possible new agents in the order?

Take, as another instance, the great order Labiatæ—the mint family. We are all, I trust, reasonably well acquainted with the properties, uses, and limitations of peppermint. Well, now, this plant in itself represents all the medicinal activity of the entire order—a very large one. Other plants have different flavors, and may on this account be more or less agreeable to some persons, but their medicinal action is entirely similar if not absolutely identical. And yet it is not uncommon to find specific effects attributed to plants of this order, and some men believe it. The Cruciferæ, the mustard family, affords another instance of similar character. Mustard-seed represents all that is to be extracted from the order; all the rest may be dismissed without thought or hesitation. And so one may pursue his course through the vegetable materia medica, excluding, without hesitation, scores upon scores of drugs which but encumber his path.

When one has gone through the materia medica in this manner, and excluded the articles which reason and common sense convince him are beneath his notice, he will be ready to make his choice from those which remain, of the remedies to use. And here I would not wish to be misunderstood. For my own purposes I exclude a large number of drugs, not because they are altogether valueless, but because there are others much more efficient, and it seems to me that we should choose for our use only the best attainable. To illustrate, the number of vegetable tonics is very great. Almost anything bitter is possessed of tonic properties. Now, almost any vegetable bitter may be used in such a manner as to cure intermittent fever. The bark of the flowering dogwood, magnolia, tulip tree, or willow will do it, as will also tansy, wormwood, or boneset, but what man of sense would think of employing any of them when cinchona or its derivatives are attainable?

I believe it was Sam Patch who died while making an effort to prove "that some things can be done as well as others." It seems to me there is considerable Patchwork in medicine of a similar character, only it is not the operator who dies in the experiment.

But, some one may say, such a course as this would commit a man to contentment with his present choice of remedies for the balance of his professional life. Not at all. By accepting the verdict of his predecessors as to the worthlessness of certain drugs, he in no way binds himself to reject new discoveries with claims that can be substantiated. He will, however, be less credulous, and, on this account, less likely to experiment with anything and everything to which his attention is called.

Moreover, such an examination of the materia medica would show upon what an unsubstantial foundation the claims of many of the articles rest. I have, in not a few instances, traced back the history of a drug from author to author till I reached the original statement that it was used for such and such purposes by the aborigines. And in some cases it has been easy to observe that the original statement was copied by one after another with very little variation, the later authors including the article simply because their predecessors included it. Such medical histories of drugs, should, I think, make us slightly sceptical, and so this scepticism does not reach the point of blind prejudice, both we and our patients will be the better for it.

In days when journals are published for the sole purpose of pushing new remedies into notice; when men are employed directly or indirectly for the express purpose of manufacturing reputations for drugs, of which the proprietors of the paper have a monopoly, a little judicious scepticism is not far removed from wisdom.

However uncertain medicine may be, however inexact as a science, however disheartening it may often be in practice, it does present some things which are sure. Having, then, excluded from our materia medica the things which we consider beneath our notice, we can begin our choice of remedies for daily use by accepting at once all those whose reputations rest upon a solid foundation.

Of remedies of vegetable origin, we should probably err little in accepting all those which yield to analysis any principle capable of producing physiological effect upon the human system, taking into account, of course, the relation of the quantity of the crude drug to the principle found, and the amount of the latter required to produce sensible effect.

Of drugs which do not meet this requirement—the possession of a demonstrable active principle—we have at least the right to reserve our judgment. Accustomed as medical men of the present day are to look for a cause of every effect observed, it seems to me only rational that they should demand the reason why a drug does thus or so, and if this be not forthcoming, they have the right to expect a very clear demonstration of the fact that a therapeutic effect is produced before accepting it.

It is an easy matter to say that a drug produces good effects in this or that diseased condition, and not very difficult to compile statistics from medical literature in support of one's statements, but let one attempt to verify such statements by actual experiment, and he often finds the task a hopeless one. I refer, of course, to drugs having no appreciable active principle capable of producing physiological effects, at least in doses proportioned to the amount of the drug employed.

Take, as an illustration, viburnum, a drug introduced a few years ago as "nervine, antispasmodic, astringent, diuretic, and tonic, and especially useful in the nervous diseases of pregnancy and in the prevention of miscarriage" (U. S. Disp., p. 1521). Let anyone endeavor to verify these claims, and he will appreciate the difficulty of the task, and probably end with the conviction that the drug is wholly useless. Such, at least, has been my own experience. And yet viburnum is employed to a very considerable extent, notably in threatened miscarriage. If the patient does not abort, the drug gets the credit; if she does, why the case was too far gone to be influenced. While we as practitioners of rational medicine, so called, are uniformly sceptical regarding the therapeutic claims made by practitioners of other schools, and rarely esteem their statistics worthy of serious consideration, we will find plenty of just such unreliable material much nearer home if we care to search for it

As with viburnum, so with many other more or less fashionable remedies—their reputed efficiency is commonly greatest in cases incapable of demonstration. Of such remedies we should choose, at most, a very small supply.

But with all the drugs of vegetable origin possessing demonstrable active principles at our command, we still have more than we need, and further discrimination is necessary in order that our armamentarium be not too unwieldy. Classification of the most important ones, based upon the effects which they produce, is essential to final selection. Such a classification must, however, of necessity be artificial and somewhat arbitrary, because

of the varying effects produced by one and the same drug in different doses and in different conditions. Illustration of this point is scarcely necessary. Everyone has in his own mind, or should have, the drugs which he employs thus classified to a greater or less extent, but not every one uses wise discrimination in selecting the proper drug from a given class when prescribing at the bedside. How many of us use opium unnecessarily? How many employ quinine antipyretically, without rhyme or reason? How many administer ergot, digitalis, arsenic, or strychnia without careful consideration?

Having by the analytical course which I have endeavored to sketch, reduced the materia medica—both organic and inorganic—to a reasonable compass, and having those remedies which we will permit ourselves to employ classified, how shall we be guided in making the final selection? For the choice of proper remedies at the bedside is, of course, our ultimate end and aim.

This question appears to me to involve three considerations, namely, 1, efficiency; 2, liability to do injury; 3, ease or difficulty of administration.

There can be no question about the advisability of always using the drug which will most certainly produce the therapeutic effect desired, save as this may be modified by its liability to act injuriously upon the patient. This is a very important consideration. For example, opium is very potent in relieving pain, and, judiciously used, seldom does harm. And yet it cannot be safely used in very young children; and it should not be employed in adult life one moment longer than absolutely required, owing to the danger to the patient of the formation of the opium habit. I know that this danger is often exaggerated, but it does exist, and we should bear the fact distinctly in mind when we prescribe at the bedside. The same may be said of chloral, and of the inhalation of ether and chloroform. These drugs should never be used indiscriminately; the question of their efficiency should always be modified by their possible dangers, and when these dangers are greater than the ills for which it is proposed to use them, they should be replaced by safer, though less efficient, drugs. Take, as another instance, aconite, veratrum, and gelsemium, all used as arterial sedatives indiscriminately—commonly, however, by different physicians. Considered merely from the standpoint of efficiency, there is little choice between them, but a consideration of their relative dangers shows them in an altogether different light. Aconite need never do harm; veratrum often produces unexpected vomiting, purging, and dangerous depression; and gelsemium is nearly as unreliable as lightning. So that you may use aconite with safety, veratrum with fear, and if you push gelsemium, you should do it with positive dread of the possible consequences.

I might go on illustrating this point almost indefinitely, by comparing the drugs of different classes with each other, but it is unnecessary.

It remains to consider the efficiency of drugs as modified by the difficulties of administering them. As previously intimated, it has been more or less the fashion to consider this first. As this involves the question of how best to administer the drugs we have chosen, it deserves rather more attention than my limits will permit.

The patients to whom we administer drugs may be divided into three classes: 1, those who are so ill as either to offer no objection to swallowing anything prescribed, or, on the contrary, strenuously objecting to everything. To the latter division of this class may be added young children accustomed to rule the house; 2, people who, though perhaps not quite sick, are still not wholly well, and who consume medicine largely as a matter of habit; 3, people who consult physicians for want of some more active employment.

The first class of patients, those who are really ill, of course, comprises the bulk of those with whom there is any difficulty. With adults not too sick to appreciate their condition, and consequently both able and willing to co-operate with us, there is commonly little trouble in administering anything necessary, and we are only required to choose the most efficient preparation of the drug desired. And here at once arises the vexed question, what are the most efficient preparations? If we are willing to accept the opinions of those who claim to be extremely solicitous for our welfare—the manufacturing druggists—we can have this question settled for us readily in the shape of A's pills, B's granules, C's fluid extracts, etc. If, however, we consider it among ourselves, we shall probably reach different conclusions. Now, it is the habit of some to consider the alkaloids or other active principles of vegetables as the most efficient preparations, and to use them exclusively, making morphia, for instance, represent opium, atropia, belladonna, strychnia, nux vomica, and so on, overlooking the fact that these alkaloids do not fully represent the drugs from which they are derived. In other words, they fail to recognize the fact that there is a time to administer morphia, and another for solid opium; that, while strychnia has its uses, nux vomica has its peculiar sphere. Moreover, the extreme practitioners of this class often employ these potent active principles in the form of gelatin or other coated granules, whose ready solution in and absorption from the alimentary tract is a matter of conjecture. I am not in sympathy with this mode of practice; still less with that whose commonest dose-measure is the hypodermic syringe. The best preparation of a drug I conceive to be that which most completely represents the crude article; and, of vegetable remedies, this is more commonly in a liquid form. I would relegate alkaloids and other active principles to their proper place, and use them in solution, if practicable, by the mouth when possible, otherwise only when necessary. And when necessary to employ remedies in pill form, these should be freshly made, commonly by extemporaneous prescription, rather than turned out by the thousand dried, coated, polished, and impregnable. And I firmly believe there would be much less complaint of the uncertainty of drugs if they were employed in this manner.

And here I wish to add one word for the benefit of those whose bugbear is *polypharmacy*—the giving of numerous drugs in one and the same dose. I see nothing irrational in the intelligent combination of drugs, and, theoretically, at least, no limit as to the number which may be thus combined and administered at a single dose. On the contrary, it seems to my mind much more commendable than the practice of frequent alternations, which only serves to annoy the patient. A young physician, in my hearing, once boasted of his physical endurance in watching with a patient six weeks, and administering medicine every fifteen minutes. Though the patient lived, I hardly consider the case as evidence against the wisdom of combining remedies, if for no other purpose than to lengthen the intervals between doses. With remedies chosen in the manner indicated, I believe there will occur little difficulty in treating all really sick people whose co-operation is obtainable. Regarding the obdurate, and the fractious children, I have no suggestions to make. Certainly the most elegant pharmacy will be of little avail.

As to the second class of patients, the habitual medicine-takers, why, it is altogether immaterial. If they require medicine at all, give it in the most efficient form, without regard to taste. On the whole, I think a decidedly bad-tasting mixture, one which stays by them, suits them best. Certain it is that some of the vilest tasting proprietary compounds have had the largest sales, and not because they restored those who consumed them, either. The same is true of pills: those which are most drastic are most highly appreciated.

Regarding the third class, still less need be said. They consult you, as I have said, for the want of more active employment. If you care to bother with them at all—it is business that pays—let them have *elegant pharmacy*, the more elegant and the less efficient the better.

THE CLINICAL RESEMBLANCE OF TYPHOID FEVER AND ACUTE TUBERCULOSIS, AS ILLUSTRATED BY A CASE.[1]

By JOSEPH EICHBERG, M.D.

CINCINNATI, O.

AMONG the few diseases which the student is taught by nearly all text-books of practice of medicine to consider as possible, in making a diagnosis of typhoid fever, is acute miliary tuberculosis. The statement is generally made without any qualification or further explanation, and the student is left to reconcile, as best he may, the types of disease as he will find them carefully traced in this same text-book. There is to him great difficulty in understanding how the regular fever curve of typhoid, with its easy and accurate subdivision into first, second, third, and fourth weeks, can be in any way counterfeited by the fever line of the tubercular disease, and most puzzling of all, is the fact, that an affection characterized by so many local symptoms as typhoid, should possibly be mistaken for a generalized infectious process, invading simultaneously, or in rapid succession, nearly all the important viscera with their investing serous membranes. The student is apt to overlook two important facts, which may even escape the attention of the more advanced practitioner. These are firstly, that the typical fever-line of typhoid does not apply to all—scarcely, I should think, to a majority—of the cases observed here (and in this statement I am borne out by the recorded experience of the large Cincinnati Hospital); and secondly, that an acute tuberculosis may be localized as to symptoms, and often in its anatomical distribution to one great serous cavity, leaving the others entirely free, or affected so slightly as to cause no special symptoms. The impression most likely to be left in his mind from his reading, and from his didactic lectures, is that acute miliary tuberculosis means a development of tubercles in the brain, lungs, liver, spleen, intestines, mesenteric glands, arachnoid, pleura, and peritoneum; and I must confess to having retained this idea myself until a very recent date, when I found in a number of autopsies made upon patients dying of phthisis or of tubercular disease the actual distribution of the disease limited very frequently to the peritoneal cavity, leaving the lungs, the supposed starting point of infection, entirely unaffected by gray tubercle, though the signs of lobular pneumonia were frequently, not invariably, present.

The easy possibility of a clinical mistake was brought home to me by a case of my own, of which the following is a brief history:

A. B——, aged twenty years, American, a young man of exemplary habits and good social standing, was seen on the evening of July 15th. He complained of considerable pain in the abdomen, which he located in the right iliac fossa, and which he said had annoyed him for twenty-four hours; it had not been very severe through the morning, so that he rode into the suburbs, some four miles, being forced to return, however, by the increasing discomfort late in the afternoon. There was rather an anxious expression of face, the skin was hot, the temperature, 101.4° F.; pulse, 98, and the respiration, 18. Physical examination showed a very flat chest, the boy being remarkably tall, the muscles not very well developed, the body being rather thin, though not badly nourished; the lungs and heart normal. There was considerable tenderness on deep pressure in the right iliac fossa, some tympanitic distention of the entire abdomen, and the knees were flexed. There was loss of appetite, but great thirst. The tongue was slightly reddened, but moist and soft, and it was a noteworty fact, that, from the beginning to the end of his illness, there were never present, for as much as a single day, the changes which this organ records in typhoid. There was no redness at the sides, no V-shaped redness at the tip; no swelling, dryness, white or yellowish coating, no fissures or furrows, no sordes on lips or teeth; from first to last the tongue remained smooth, comparatively pale, moist and flexible, was never tremulous or protruded with difficulty, and only toward the end bore indentations of the teeth, as a sign of general muscular relaxation, such as accompanies all conditions of exhaustion. It happened that just at that time the hospital wards had received several cases of typhoid, that a case of peri-typhlitis and subsequent general peritonitis under my own observation was convalescing, and I at once expressed an opinion that the case was likely to be protracted. He was ordered quiniæ sulph., gr. iij.; pulv. opii., gr. ¼, every three hours, and a strictly fluid diet, to consist largely of milk.

At 4.15 A.M., July 16th, he had a violent chill, lasting about fifteen minutes, after which the temperature rose to 103°, the pulse to 120, and the pain in the abdomen slightly increased. Hot flaxseed poultices, large enough to cover the entire abdomen were ordered to be changed every half hour. The bowels were constipated. The fever gradually declined toward evening, but at 9.30 P.M. he had another chill, not so violent and of shorter duration than that of the morning.

July 17th.—A.M.: Temperature, 101°. Considerable distention of the abdomen; gurgling in the right iliac fossa; abdomen still tender; slight increase of resistance when pressing over right iliac fossa. Temperature, P.M., 101°; pulse, 96.

July 18th.—A.M.: Temperature, 102.4°; P.M.: temperature, 101.5°. Had an attack of epistaxis during the day. Otherwise symptoms unchanged.

July 19th.—Slight diarrhœa; two or three stools; temperature, 101°; pulse, 96.

July 20th.—Abdomen not so tender; tympanites diminishing; appetite fair. Is troubled with slight headache.

July 21st.—Temperature, 99°; abdomen becoming soft; says he can make pressure at any point without giving rise to pain. Feels very much easier; no diarrhœa.

On the 23d of July, having been free from pain for several days, the evening temperature not having risen above 99°, as tested in the mouth, he was allowed to get up, having received a caution as to remaining perfectly quiet and not attempting any exercise. However, the boy felt himself so well, that he walked several times into an adjoining room, spending the greater part of the day on a sofa there, and returning to his bed at four in the afternoon. In the evening, he complained of a slight return of his pain, and slight diarrhœa set in, two or at most three stools a day, light in color and of rather pasty consistency. His diet was limited to milk, of which he took about three pints daily.

On July 24th, the temperature was 99.4°; in the evening, 100°. It were a monotonous repetition to give the daily record of his illness from that date to August 2d, when a decided change for the worse set in. In those nine days, there was comparatively little change in his condition, the diarrhœa not again manifesting itself, the temperature remaining at or nearly at 101°, with a distinct tendency to morning exacerbations, the appetite varying from day to day, the pain in the bowels gradually getting better under the use of hot poultices most assiduously applied, and the tympanitic distention gradually giving way to a feeling of doughy softness, seemingly limited to the abdominal wall. There was not, at that time, any doubt in my mind as to the typhoid character of the malady; but I was rendered uneasy by a steady emaciation, whose progress was visible from day to day, almost from the morning to the evening visit, and which was out of all proportion to the intensity of the fever and other symptoms. The pulse, too, continued good, being moderately forcible and full, and varying between 88 and 96 per minute. The treatment with quinine and opium, in small doses was continued, and the constipation which had now become a persistent symptom was relieved by simple enemata.

[1] Read before the Cincinnati Medical Society, October 5, 1885.

On August 2d in the evening the temperature reached 103°. The boy had been doing fairly well; he received an unexpected visit from his father, was encouraged to talk rather freely, and owing to the presence of a number of visitors, a lively general conversation was carried on in the sick-room, in which he joined. The fever remained high for the next three days, there being no new development of any local symptoms, save a large area of pulsation over the abdominal aorta in the region of the cœliac axis, so that the impulse could be felt an inch and a half to the right of the median line down to the umbilicus, and about one inch to the left of the median line. Taken in connection with the rise of temperature, and my hypothesis as to the cause, it seemed not unlikely that infiltration, and possibly suppuration of the retro-peritoneal glands was going on, and I was in great measure strengthened in this belief when at 4 P.M., August 5th, he had a slight rigor, followed by fever and profuse perspiration. He was seen that evening by Drs. Mackenzie and Dandridge, in consultation, and I laid before them a proposition to make an exploratory incision for the purpose of giving exit to any pus that might be forming in or very near the peritoneal cavity. The plan was negatived—happily so, I think, for the operation would have been made to bear the opprobrium of the boy's death. The pulse now became very feeble, irregular, 120 per minute, the respiration 28, alæ nasi moving on inspiration, the face wore a more pinched expression, and the strength was rapidly declining. There was retention of urine, so that the catheter had to be employed, the urine, being dark in color, slightly alkaline, and, owing to the great heat, undergoing ammoniacal fermentation almost as soon as drawn; there was an abundant deposit of phosphates, no albumen.

August 6th, at 4 P.M., had a very severe chill, so that he shook the bed, lasting fifteen minutes, followed again by profuse sweating. Owing to the cardiac feebleness he was ordered tr. digitalis, gtt. xx.; ether sulph., gtt. xxx.; spts. frumenti, ℥ ij., every four hours. The second chill occurred, notwithstanding a dose of quin. sulph., gtt. xx., taken at 5 A.M. After the chill, the temperature, which had reached its highest point at 4 A.M., being then 104.6°, and had gradually fallen until it marked 101.3° at noon, rose again to 104°. The chill was not again repeated, the patient suffering occasionally from slight rigors, and the temperature remained high for two or three days. There was again great abdominal distention, gurgling was elicited by very light pressure over the whole surface, and pain complained of on pressure in the right iliac, right lumbar, and umbilical regions. The pulsation in the latter region now became more distinct, and on August 9th, the tympanites having subsided, a hard indurated, irregularly rounded mass was felt through the abdominal parietes. Auscultation over this mass revealed a distinct double murmur, synchronous with the heart-sounds, and similar to the murmur obtained by making firm pressure with the stethoscope over the carotid or subclavian artery. It was interpreted to signify that pressure was being made either on the aorta itself or on the cœliac axis by a packet of enlarged glands. But my views as to the cause of this enlargement had undergone considerable modification by many of the anomalous symptoms presented, and Dr. Mackenzie, who had hesitated about accepting the diagnosis of typhoid fever, now agreed with me in regarding it as a case of acute miliary tuberculosis, limited to the peritoneal cavity. The most careful examination of the heart and lungs revealed nothing abnormal.

August 10th.—The patient passed the best day he has known in several weeks. The morning temperature was 99°, the pulse 84, the respiration 20 and fairly regular, his manner was more lively and cheerful, though he had been quietly hopeful from the first, and he expressed himself as feeling very hungry. It was apparent that he was becoming constantly weaker and that the emaciation was progressing. He moved freely from side to side, was able to pass urine voluntarily, and complained of no pain except on pressure over the umbilicus. The apparent improvement was so marked that his family became extremely hopeful of his ultimate recovery.

August 11th.—He passed an extremely restless night. Physical examination this morning reveals a loud, very distinct systolic murmur, heard with considerable intensity over the whole præcordial region, and having a musical, distinctly whistling character, very much like the sound produced by driving a whip forcibly through the air. The heart's action was rather feeble, but tumultuous, and the pulse small and easily compressible. The murmur over the tumor in the abdomen was now systolic, having lost its double character. It was not in any way related to the cardiac murmur, which had developed later, as there was between the two a distinct area in which no abnormal sound could be heard. The stomach, for the first time in the entire course of his illness, became troublesome, and all liquids taken were rejected, with large quantities of bile. There was not much retching, vomiting taking place without any effort. Bowels constipated.

August 12th.—Vomiting controlled by small doses of calomel and camphor. Perspiring very freely. Endocardial murmur not as loud as yesterday; has more the character of an ordinary murmur. Appetite good. Is losing ground perceptibly. Temperature, 102.6°; pulse 120, very small and feeble.

August 13th.—Countenance this morning has Hippocratic type. Had slight chill yesterday afternoon. Intellect perfectly clear. Some pain about the umbilicus, where the indurated mass can be more clearly felt, partly on account of its enlargement, partly because of the increasing emaciation. Abdomen neither tympanitic nor retracted; still has a certain boggy feel.

August 14th.—Died this morning at 8 A.M., having retained consciousness to within an hour or two of the end. An autopsy was not obtained, and yet I have not much hesitation in affirming the case to have been one either of acute tuberculosis or of pyæmic absorption from some focus in the peritoneal cavity. Typhoid can be eliminated, I think, because of the absolute freedom from all cerebral disturbance, because of the peculiarities of the temperature in the last week, because of the persistent constipation, because of the clean, moist tongue and the absence of any signs of feebleness or prostration, other than could readily be accounted for by the gradual muscular waste. We use the term typhoid, as applied to other diseases, to characterize the presence of these symptoms, probably of all nervous origin; and the absence of all of these, irrespective of the temperature or condition of the bowels, seems sufficient warrant to exclude this affection. It may be objected that the endocarditis, developing in the last few days, would be a very unusual complication of acute tuberculosis.

It may be a rare complication, certainly, but that this is not sufficient reason for altering the diagnosis, is in a measure demonstrated by the occasional reports of cases of supposed typhoid complicated by parotitis, the autopsy alone revealing the true nature of the case. Such cases are reported by Senator (*Berl. kl. Wochensch.*, 1881) and Samter (*Berl. kl. Wochensch.*, 1884). The case of Senator is particularly interesting, the patient's history containing many points of similarity with the case here reported, the tongue being moist, the intellect perfectly clear, epistaxis occurring in the first week, and abdominal distention and tympanites being prominent symptoms in the second and third weeks. A suppurative parotitis appeared two days before the fatal termination, and the clinical diagnosis, made by so careful and experienced an authority as Senator himself, was typhoid fever. It remained for the autopsy to demonstrate this plausible error. The fact of the patient's having had an attack of typhoid fever three years before could not militate against the diagnosis, as Senator and others had met with cases in which a second attack

undoubtedly occurred. There was a certain anomaly in the temperature curve, the morning remissions being very marked, but this was not considered sufficient in itself to cause a serious doubt, and when finally, after repeated occurrence of epistaxis, suppurative parotitis set in, a complication recognized as a comparatively frequent attendant of enteric fever, there seemed no longer any room for doubt or hesitation, the prognosis at the same time being thereby made very unfavorable. The latter was confirmed all too soon, and the autopsy revealed miliary tuberculosis of the lungs, caseous bronchial glands, miliary tuberculosis of the enlarged spleen, liver, and both kidneys. There were not the slightest indications, either of the old attack of typhoid, or of any more recent trouble in the intestines. The difficulty of diagnosis in this case was enhanced by the early appearance of the characteristic roseolar spots, a symptom of the greatest rarity in acute miliary tuberculosis; in our own case the external application of hot poultices and turpentine stupes would have made the very recognition of the rose-colored spots impossible, had they been present. Senator, in this very valuable and explicit contribution, refers to the comparative frequency of acute miliary tuberculosis in individuals who up to that time had been in apparently good health, thus rendering the diagnosis much more difficult. He refers to other symptoms of supposd diagnostic value, as *distention of the abdomen, dicrotic pulse, partial deafness, tendency to hemorrhages, particularly epistaxis*, in typhoid fever; and *cyanosis, dyspnœa, irregularity of the pulse, and an increase in frequency of the latter out of all proportion to the rise of temperature*, in tuberculosis. But his own case shows the unreliability of many of these symptoms, though he says that of all published cases he knows of only one other in which epistaxis occurred during miliary tuberculosis, and he concludes his paper by affirming the impossibility of correctly diagnosing such a case as his own.

In the case which forms the subject of this paper there was another symptom, which seems to me of special diagnostic value—a rapid and progressive emaciation, very decided, disproportionate to the amount of fever and general constitutional disturbance, and steadily increasing despite a very fair amount of nourishment consumed, and apparently assimilated, daily. This, in conjunction with the other facts which would not well comport with the hypothesis of typhoid, decided the diagnosis. It is true, the crucial test of its correctness, the autopsy, was denied us; yet it seems to me that there can be no question as to the exclusion of typhoid fever. There yet remains to be explained the acute endocarditis. Samter, in the article referred to (*Berl. kl. Wochensch.*, 1884), believes that there is in some cases of acute miliary tuberculosis a double infection, a septic and specifically tubercular one, anatomically distinct from each other, as evidenced by the presence of the bacilli of tubercle and micrococci, and it is possible that the septic element may have manifested itself here in the development of the endocarditis.

Perhaps it may be stated in objection to the diagnosis that typhoid and acute miliary tuberculosis may be simultaneously present; of such an association there are, according to Senator, but three authentic cases on record, and it is not necessary to seek for so distant a hypothesis, when the clinical history is sufficiently explained by assuming the case to have been one of acute tuberculosis. There is one point in connection with the history which has been the subject of some speculation with me, though it must be a fruitless kind of inquiry, and that is whether or no the permission to get up on the ninth day was in any way responsible for the farther development of the symptoms. It seemed unreasonable to confine the patient after his having passed three days with scarcely a trace of fever and with entire freedom from pain; and, though he transgressed the limits of indulgence, I cannot make this the cause of the farther and fatal course of the disease. I doubt whether all my hearers will be willing to agree in the diagnosis, even when I mention the fact, made known to me only upon persistent inquiry after the unfortunate death of the young man, that there existed a decided hereditary tendency to tubercular trouble on the mother's side, but if the paper shall have succeeded in calling attention to the close similarity of the two diseases, even to what have been considered as almost pathognomonic symptoms, a resemblance extending from the beginning to the close of the attack, it will have accomplished all that I had hoped for it. I append the post-mortem notes of three cases in which the autopsy was made by myself and in which the tubercular deposit was confined almost entirely to the abdomen.

No. 1, June 19, 1885.—A. N——, aged twenty-five, body that of a white woman slightly below average height, fairly developed, poorly nourished. Autopsy nineteen hours after death, rigor mortis slight. On puncturing the diaphragm, after the usual median incision had been made, air or gas escaped from the left pleura with a hissing sound. The left pleura found thickened, the result of chronic inflammations. The left lung was much compressed, so that it occupied about one-third of its normal volume. Its substance was solidified and covered with a thick layer of lymph. No point could be discovered by which air had entered the pleural cavity. The right lung was œdematous; small, indurated deposits were found in its lower lobe, but no signs of caseation.

The liver, spleen, stomach, intestines, uterus, and bladder were everywhere covered with tubercular deposits, which had led to the formation of many adhesions between neighboring viscera. The parietal peritoneum was covered with similar deposits. Uterus, slightly enlarged, contained at the fundus a small, hard, submucous fibroid. Fallopian tubes were filled with caseous material, probably the result of a chronic salpingitis. Retro-peritoneal glands and thoracic duct were enlarged and thickened from tubercular and caseous masses. Pancreas contained along its surface a number of small caseous deposits.

No ulcers were found in the intestines, nor were there marked changes in any of the viscera.

Cause of death.—Tubercular peritonitis, probably secondary to caseation from chronic salpingitis.

No. 2, July 28, 1885.—A. H——, body that of a colored boy about twenty years of age, well developed, poorly nourished, slightly below average size. Autopsy ten hours after death, rigor mortis absent. Extreme emaciation everywhere apparent. On opening the abdomen all the viscera were found firmly adherent to one another by bands of fibroid adhesions, which evidently had their point of departure in a chronic tubercular process associated with tubercular ulceration of the intestines. Fully one-half the abdominal cavity was occupied by a large packet of caseous glands, which projected from the median line over each side of the spinal column, and were intimately adherent to one another and to neighboring parts. All the abdominal viscera were covered with small caseous tumors adherent to the capsule. The intestines were in many places so firmly matted together that it was impossible to separate the adhesions without tearing the intestinal wall. Bands of adventitious tissue ran across the wall of the cavity, intimately blended with loops of intestines.

In two or three places ulcers of the intestine had extended down to the peritoneal layer. Spleen, amyloid; liver, cirrhotic; kidneys, fatty; lungs presented characteristic changes incident to general tuberculosis, with one or two cavities; brain, œdematous.

Cause of death.—General tuberculosis, mainly in peritoneum.

No. 3, June 21, 1885.—A. P——, aged sixty, body that of a white woman, well developed, fairly nourished, of average size. Autopsy fourteen hours after death, rigor mortis moderate. On making the usual median in-

cision it was found that the abdominal viscera were all matted together by tolerably firm, comparatively recent adhesions. Thorax slightly distended, bulging forward owing to the emphysematous condition of the lungs, which organs, aside from the emphysema, were normal. Heart soft and flabby. Liver fatty, slightly enlarged, its peritoneal surface (as, indeed, the entire peritoneal surface) was densely strewn with gray miliary tubercles. Kidneys enlarged, cortex gray and slightly fatty, capsule adherent, leaving a faintly roughened surface when detached, evidently the early stage of cirrhotic kidneys. Stomach normal, covered with tubercles. Intestines showed no ulcerations, contained small quantities of thick mucus and light-colored fecal matter. Fallopian tubes were both dilated with clear fluid, presenting a symmetrical condition of hydro-salpinx. Endometrium was congested and swollen. Retro-peritoneal glands slightly enlarged, but not caseous. Brain not examined. There was noted a slight ulceration of the right cornea.

Cause of death.—Tubercular peritonitis. No focus of caseation was discovered.

As a matter of very considerable interest, and one calling for farther careful study, I append the following short extracts from the original article of Brunniche, published in the *Gazette Hebdomadaire*, 1875, No. 3, to show the value of the peculiarities of temperature in deciding a doubtful case:

Of 52 patients dying of phthisis, in whose cases a careful record of the temperature was kept, the inverse type (morning exacerbation with evening remission) was noted in 33. The inverse type seemed to bear no relation to the degree of fever, to any hyperpyrexia, to colliquative or night sweats, nor to any phenomenon revealed by auscultation, but it was found on post-mortem examination to have occurred much more frequently in cases that became *tubercular*. In phthisical cases, without the presence of miliary tubercle, the inverse type was present in only twenty-five per cent; in those in which tubercles had developed, the history showed this peculiarity of the temperature in eighty-six per cent. *Brunniche* regards miliary tubercle as a sort of inoculation through the agency of caseous matter contained in the lymphatic glands, and thinks himself justified in concluding from his experience that the inverse type is probably very often a sign of miliary tubercular infection.

In a series of 41 cases of phthisis, there were, first, 13 cases without tubercular infection, and in these the inverse type was noted in 38.4 per cent; second, 28 cases with tubercular nodules in the lungs and other organs, and the inverse type was present in these in 70.87 per cent.

In 10 cases of primary acute miliary tuberculosis, without any accompanying phthisis, the inverse type of temperature was present in ninety per cent.

In another series of 17 cases of primary acute miliary tuberculosis 15 presented this peculiar range.

There was also a predominant tendency to the inverse type in female patients as compared with those of the male sex; probably, Brunniche thinks, owing to a greater predisposition of females to tuberculosis.

THE DEATH OF A MEDICAL POET.—Our French exchanges announce the death of Dr. Camuset, of Paris, and some of them lament in him the loss of a talented medical poet. The *Cincinnati Lancet and Clinic* has taken the trouble to translate two of his sonnets, of which the following is a specimen:

"THE CORN.

"I'm a poor little corn, and protest
'Gainst the shoemaker raising a blister.
'Tis the fashionable boot I detest.
Heaven help dear phalanges! my sister.

"The chiropodist doeth his best,
He wields a sharp knife, the professor.
Short is his triumph, from pain there's no rest,
I'm renewed, spite the iron aggressor."

FURTHER REPORT ON OXYGEN AS A THERAPEUTIC AGENT.[1]

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IN again reverting to a subject upon which I have already written several addresses and journal articles, no apology is necessary, since I am a confirmed believer in, and the prevailing temper of the profession generously tolerates, if it does not boldly encourage, special lines of medical inquiry. It is by confining our chief efforts to a single subject of investigation that each is enabled to contribute valuable results to the general stock of professional knowledge.

Since the publication of my first paper upon this subject, I have further pursued the study of the therapeutic possibilities of oxygen and its congeners, have received hundreds of letters of inquiry from practitioners in various parts of the country, and have corresponded extensively on the subject. I have also published several articles in THE MEDICAL RECORD and elsewhere, some of which have been reprinted in pamphlet form, and may be had on application.

Papers and reports bearing upon this subject, have also, from time to time, appeared in various foreign as well as American medical journals.

Loyssel, in the *Journal de Médecine de Bruxelles*, August, 1884, reports results of extensive experiments with the pure gas. During the year I have received a copy of a work published in 1870, at Calcutta, by J. E. Purdon, Staff Assistant Surgeon in the English Army operating in the Indies. It is a quaintly printed octavo of 120 pages, entitled: "Cholera; and Efforts toward Framing an Equilibrium Theory of Disease."

Dr. Purdon labors with really ingenious plausibility to show that oxygen, and its actinic state, ozone, by their presence or absence are important, if not principal, factors in the origin, dissemination, and antagonism of cholera and other epidemic and zymotic diseases.

Loyssel, in the paper referred to, formulates the following conclusions:

1. In certain cases of poisoning, viz., by chloroform, ether, chloral, opium, sulphide of hydrogen, carbonic oxide and hydrocyanic acid, oxygen is the only means of preserving life after all other means have failed.

2. Its presence in the operating-room would be an infallible safeguard against fatal accidents from the use of anæsthetics. It promptly restores sensibility and eliminates narcosis in all such cases.

3. It offers the best prospects for success in asphyxia from strangulation, drowning, poisonous gases, etc., as also in cases of suspended vitality in the new-born.

4. It will almost surely sustain life in all cases in which respiration has not entirely ceased, even if the intervals between inspirations be very great, provided it be persistently exhibited.

5. If cardiac and respiratory action have been absent for but a short time, resuscitation is often possible through the use of oxygen; and this agent should be perseveringly used in all such cases, even when appearances indicate that all efforts will prove useless. Cases have been frequently reported of drowned persons and apparently still-born children being fairly raised from the dead by persistent endeavors with oxygen.

6. There is no contraindication of the gas in any case of asphyxia.

7. The gas can be respired in notable quantities without the slightest injury.

Dr. Holstein, in the *Gazette Médicale de Paris*, asserts that oxygen has marked power in enfeebling or inhibiting exaggerated reflexes.

Professor Lashkevitch, of St. Petersburg, reiterates this assertion, and a this suggestion, Dr. Favr, of Kharkov

[1] Read before the Medical Association of Northern New York, at Malone, October 6, 1885.

(reported in *Vratch*, No. 13, 1885), resorted to oxygen inhalations in two cases of puerperal eclampsia, and his efforts were followed by prompt and brilliant results.

The first was that of a seamstress, aged nineteen, who was brought to the hospital in an unconscious state, cyanotic, with stertorous breathing, the convulsive paroxysms being very frequent, and each preceded by a uterine contraction. Warm baths, wet packings, and enemata had been thoroughly tried without affording any relief. Chloral hydrate failed to mitigate the paroxysms, and even chloroform inhalations gave but slight and transient relief. Oxygen was then resorted to as a forlorn hope. Within five minutes from the first inhalation of the gas the patient recovered consciousness sufficiently to call for a glass of water, the pulse fell from 120 to 90 per minute, and a tranquil sleep of two hours' duration intervened. At the end of this period uterine contractions recurred, without exciting an eclamptic seizure; but on suspending the oxygen inhalation the paroxysms soon returned. A fresh supply of the remedy brought each paroxysm to a speedy termination and quiet sleep followed each resumption of oxygen inhalation. At this juncture, the os being not yet dilated, Barnes' dilators were used, the membranes punctured, and the delivery completed without further accident. The patient was discharged on the nineteenth day after confinement, in a very comfortable condition.

The second patient, a primipara, aged eighteen, had two paroxysms of eclampsia, *post partum*, twenty minutes apart, and lasting twelve minutes each, the patient remaining unconscious in the interval. On the administration of oxygen consciousness at once returned. Four more paroxysms followed, but they were very much milder, and separated by intervals of entire consciousness and perfect comfort. This patient made a rapid and satisfactory recovery.

Dr. Favr concludes his paper by expressing his enthusiastic hope that further tests will so corroborate these results that, in the near future, oxygen-gasometers will become a common and indispensable feature of all lying-in hospitals.

Among the newer preparations brought forward, recently, as related to the oxygen family, Professor Beck stands godfather to one called by the rather questionable name *Ozonine*. It is a liquid, depending wholly upon ozone, or actinic oxygen, for its medicinal virtues, and was recently discussed at a meeting of the Biological Society of Paris (*Repertoire de Pharmacie et Journal de Chimie Médicale*, 1, 1885).

Of this preparation—the details of its manufacture not being given—Onimus, of Paris, declares that as a disinfectant it is scarcely less prompt or efficient than ozone in a gaseous state.

Brand, of Toulon, used this drug with marked success in small-pox and in cholera.

Griol and Long assert that for putrid and zymotic diseases and conditions, in hospital practice, this preparation, by constantly liberating ozone, affords to nurses, physicians, and attendants, certain and safe immunity from infection.

Its application to flesh in an advanced state of decomposition, and to putrid eggs, promptly corrected all odor and appearance of putrefaction.

It blackens metallic silver, changes arsenite of potash into arseniate, and gives the usual reactions of ozone with the test-papers of Schönbein and Houzeau, as also with thallium paper.

Thus as an antiseptic, antizymotic, antiputrefactive, and disinfectant, this preparation may, in time, supersede the entire list now in use.

Following in the wake of the above, a Boston firm has offered a preparation called *ozone water* (*Aqua Ozonata conc.*), which is claimed to be an efficient form in which to exhibit ozone, both as a disinfectant and for internal administration. Although I have used this article to some extent it has not met my expectations; but my experience with it does not warrant any intelligent or final decision as to its merits.

Of *hydrogen dioxide*, H_2O_2, commonly called peroxide of hydrogen, and by some inaptly called "oxygenated water," I have spoken in former papers. Among recent experimenters with this compound, Hensel, a German chemist of note, has given it careful study, and has published the results in a brochure which has been translated into English by Professor W. A. Dayton, assisted by Mr. Paul Trentler, of New York. The translation has not yet appeared in print, but it is to be hoped it will ere long be rendered available to the American profession.

According to the interesting table of Professor Miguel, peroxide of hydrogen stands third on the list, as to potency in preventing putrefaction, the binoxide of mercury and iodide of silver alone excelling it in this direction. Since it is entirely non-irritant, non-toxic, and almost as bland in use as simple water, it ought to supplant all the toxic and irritant agents now in use in surgery for the purposes named.

It is also an accurate and reliable test for pus in urine. By adding a solution of the peroxide to the suspected sample, brisk effervescence at once ensues, if pus be present.

Dujardin-Beaumetz has recently given the results of some experiments with this drug, internally exhibited, in cases of severe anorexia, in diabetes mellitus, and in polydipsia. In the first, return of appetite was readily accomplished without causing any gastralgia or other untoward symptoms. In the cases of diabetes the results were negative. In a case of polydipsia, in which twenty-eight litres of urine were voided daily, the improvement was very prompt.

In the *New York Medical Journal* of April 25, 1885, Dr. Dayton, whose joint translation of Hensel's work has been referred to, gives a summary of his experiences with peroxide of hydrogen. Having had his attention called to it by Hensel's enthusiastic description of its properties, he essayed its use both topically—chiefly in spray—and internally, in solution, in severe cases of throat, nose, and ear disease, "complicated with tubercular infiltration of the lungs." Dr. Dayton concludes his paper, which will well repay perusal by all who are interested in the subject, by asserting, "that the peroxide of hydrogen has a future among the most trusted resources in the materia medica, I have no doubt. It is a potent deodorizer, it is an eligible antiseptic (in [?] and out of the circulation), and it is an effective remedy in a large class of diseases in which mucous-membrane tissue is chiefly involved. For cleansing purposes it has no equal in any known agent. In operations on mucous membrane, where the secretions and hemorrhage often embarrass the surgeon, the use of a strong solution of the peroxide (twelve per cent.) facilitates progress by decolorizing the blood and by its cleansing, styptic properties."

Dr. F. Allport, of Minneapolis, in a recent number of the *American Journal of Ophthalmology*, gives a strikingly similar report of experiments with this drug, used in the same class of diseases. He, however, evidently writes, as do most recent observers, in utter unconsciousness of work done and reports published by confrères and predecessors; hence encumbering his brief paper with a reiteration of the now somewhat trite history of the original discovery, etc., of the compound.

Certain scientists are now asserting that the immunity from pulmonary and other degenerative diseases, and the general healthfulness enjoyed by those who dwell in the immediate vicinity of pine forests, is largely due to the constant presence of peroxide of hydrogen in the vapor of the atmosphere.

These pine districts have, on the same account, been noticed to have a remarkably beneficial effect on the voice.

Heretofore it has been the custom to ascribe these effects to ozone.

Nitrogen monoxide.—On the therapeutic use of this

gas I have received nothing new from foreign sources since the publication of the several papers already referred to. If anything of importance concerning it has appeared, at home or abroad, it has escaped my notice. While its importance as an additional member of the oxygen group cannot be called in question, no one of the foregoing authorities makes the slightest allusion to this compound, which must eventually be recognized as an essential adjunct to every comprehensive trial of the so-called "oxygen treatment."

This gas is the "nitrous oxide" of the old nomenclature, is more generally known by this name, and is represented by the formula N_2O. It is the basis of the "well-kept secret," for years so successfully vaunted by polished and oily-tongued quacks as "Compound Oxygen;" and, it must be admitted, that in connection with some wholesome hygienic rules persistently inculcated, these advertising professional outlaws have really performed some therapeutic, as well as *moral*, wonders by its aid. While no honorable member of the profession can respect their pusillanimous claims as "discoverers" of a "new compound of oxygen," or can do otherwise than feel contempt for their cheap and vapid "home-treatment" swindle, composed, as has been reliably shown, of inert solutions of the nitrates of lead and ammonium, my now somewhat extensive experience compels me to esteem nitrogen monoxide an essential adjunct in nearly all instances where oxygen is indicated. When I say that I scarcely ever treat a single chronic case without its aid, this admission is as strong evidence as I can adduce of my personal estimate of its value as a potent and essential modifier of pure oxygen.

Here, again, American enterprise has lagged, and foreign investigators have given us most of the accurate knowledge we possess concerning this gas. Its fame and excellence as a temporary anæsthetic have generally overshadowed any claims it has as a therapeutic agent. In fact, a fairly inexcusable degree of ignorance and misapprehension exists, on the part of the profession, concerning the chemical nature and physiological possibilities of nitrous oxide gas. Even by our foremost chemists it is assumed that anæsthesia produced by it is a true narcosis, a genuine asphyxia. Thus Dr. Squibb says ("Transactions New York State Medical Society, 1871," p. 201): "A patient may, doubtless, be as effectually drowned by nitrous oxide as by water, and the resuscitation from partial drowning by it involves the same principle of treatment."

This assertion is a concise statement of the average estimate of the physiological relations of this gas.

With all deference to the generally dispassionate and proverbially accurate opinion of the eminent scientist who utters it, this estimate is wide of the truth, and utterly misleading. All modern dentists can refute it by daily experience, thousands of their patrons inhaling it, to the extent of physiological saturation, as it were, without suffering from any of the usual sequelæ of asphyxia. On the contrary, the usually observed effects following its excessive exhibition, aside from the temporary anæsthesia produced, are those of pleasurable exhilaration and restfulness. There are no evidences that the blood of subjects caused to inhale even excessive quantities of this gas is poisoned, as by carbon dioxide or carbonic acid; therefore it remains to be shown that the nerve-centres are momentarily benumbed in some other way than by the toxic influence of this latter agent, or the non-aeration of the blood.

I have not hitherto found time, nor am I aware that any one has yet attempted to perform the necessary physiological test-experiments on the lower animals, which can evidently be made to set forever at rest this scientifically disputed but, empirically, already settled question.

Dr. Ziegler long ago insisted that this gas, being almost as good a supporter of combustion as pure oxygen, is capable, when inhaled into the lungs, of supplying oxygen to the animal system. My clinical experience with it certainly corroborates this estimate.

If it were, in fact, an asphyxiating agent, as so loosely taught, it is evident that its exhibition in unstinted quantities to literally hundreds of thousands of dental patients every year, would be far more frequently attended by disastrous sequelæ. As it is, the danger of a fatal result, even after the most careless and excessive exhibitions of it, in dental practice, to patients representing every possible degree of vital stamina, is immeasurably less than that represented by the buncombe lightning risk appended to some forms of fire insurance policies. It is practically nil, since an equal number of deaths would occur, in the same practice, from nervous shock, accidental anomalies—almost from old age!

To refute and correct this antiquated misapprehension, it is only necessary to quote an outline of its chemical nature and physiological properties from any authentic hand-book of chemistry, viz.:

N_2O is a colorless, almost inodorous gas, of distinctly sweet taste. Its specific gravity is 1.525; a litre of it weighing 1.97,172 gramme; 100 cubic inches weighing 47.29 grains. It supports the combustion of a taper or a piece of phosphorus with almost as much energy as pure oxygen; it is easily distinguished, however, from that gas by its solubility in cold water, which dissolves nearly its own volume. Mixed with an equal volume of hydrogen, and fired by the electric spark in the endosmometer, it explodes with violence, and liberates its own measure of nitrogen. Every two volumes of the gas must consequently contain two volumes of nitrogen and one volume of oxygen, the whole condensed or contracted one-third —a constitution resembling that of the vapor of water. *If quite pure* (the italics are mine), or merely mixed with atmospheric air, it may be respired for a short time without danger or inconvenience. The effect is very transient, and is not followed by depression (Fownes).

Those who have witnessed fatal cases of asphyxia from respiring "choke-damp," or any other asphyxiating gas, need not be reminded that the rapidly fatal toxæmia of the latter agents, with the accompanying cyanosis, œdema, and distortions, is quite unlike any of the foregoing phenomena attending the use of nitrous oxide.

Of the millions of instances of its inhalation, even to complete saturation of the system, for dental and surgical purposes, how many have proved fatal, or even temporarily injurious? Surely not so many as have dropped dead while passing along the street, or sitting at table, or as have been smitten by lightning, during the same time.

Can such a record attach to so potent an asphyxiator as Professor Squibb would have us think is found in gaseous nitrogen monoxide?

Reverting to the several authorities briefly cited, it will be seen that, little by little, the meagre literature bearing upon the therapeutic possibilities of the oxygen group is being added to, and, in time, we shall not be without cumulative, as well as conclusive evidence, of a clinical character, in connection with this interesting subject

The most serious drawback or hindrance to the rapid progress of this so-called oxygen treatment, which may be aptly styled the principal branch of natural therapeutics, based as it is on reason, physiology, and clinical success, lies in the fact that, with our present facilities, or lack of facilities, its extensive clinical exhibition involves more time, care, and cumbersome apparatus than a majority of practitioners can devote to it. It is for lack of the *required patience and painstaking that so many experiments have failed, and will continue to fail, of satisfactory results.*

But facilities are being constantly increased and improved. Oxygen can now be had, condensed in rather unwieldy but portable iron flasks, containing one hundred and two hundred gallons each. Nitrogen monoxide has for years been available, in liquid form, in flasks of

readily portable size; and several manufacturers are now giving us the peroxide of hydrogen in convenient form and of unexceptionable quality. The liquefaction of oxygen is also, at last, an accomplished fact; M. Cailletet having recently perfected a process and an apparatus of very simple character by which this result is easily attained. The process is thus sketched: Ethylene is brought to the boiling-point in open vessels, producing a degree of cold represented by —123° C., or —253.4° F. At this point oxygen assumes a liquid form, and may be stored in strong flasks. It ought not to be long ere we can procure this element at the counter of any well-stocked pharmacy in suitable vehicles for ready transportation and instant use.

A French mineral-water firm has begun to supply Paris dinner-tables with distilled water charged with oxygen. The beverage is mildly exhilarating and likely to become popular. The idea was suggested by the favorable report of Dujardin-Beaumetz to the Société Thérapeutique already referred to.

I shall be glad to assist in an advertising boom for the first American firm which shall have the enterprise to follow suit.

As an offset to the charge of enthusiasm and hobby-riding it may be pertinent to reiterate a few well-known physiological and vital aphorisms:

"Oxygen is the sustaining principle of animal life and of all the ordinary phenomena of combustion.

"The process of respiration in animals is an effect of the same nature as common combustion. The blood contains substances which slowly burn by the aid of the oxygen thus introduced into the system. When this action ceases, life becomes extinct" (Fownes).

The biblical account of creation says, God breathed into his nostrils the breath of life (oxygen) and man became a living soul. Nor can animal life be maintained for a single hour without it. The first gasp of the newborn is for oxygen, and this instinctive and involuntary struggle continues, without a moment's cessation, at every step of the journey, from the cradle of infancy to the ever-open portals of "that pale realm from whose bourne no traveller returns."

Nine-tenths of all the curable diseases with which the human race is afflicted are the direct results of deprivation; they are genuine *toxicoses*. Each individual nurses within his own breast the poisoned arrow which finally slays him. All the habits, fashions, and tendencies of our modern civilization lead to physiological robbery, physiological semi-asphyxia. The poor are "hovelled and hustled together, each sex like swine," while the rich vie with each other in devising costly mausoleums in which to immolate themselves.

The race, as a whole, ekes out but half its possible days on earth for want of better air—oxygen. All the processes of animal life go on by the aid of, and are incessantly presided over by, this omnipresent and well-nigh omnipotent element.

It may be urged that the natural atmosphere contains the true normal and sufficient proportion of oxygen for human consumption. Granted, but what proportion of the human race, living under civilized conditions, is fortunate enough to experience even an occasional breath of "natural atmosphere," untainted by floating germs, smoke, dust, or nauseating odors? Even on the frozen summits of the Alps, Tyndall detected floating motes and impalpable impurities; while the air of towns and cities is constantly loaded with noxious, though often invisible, organic and septic particles. The mansions of the wealthy residents afford no immunity. The heavy carpets and soft upholstery furnish lurking lodgement for clouds of dust-particles, which every movement of occupants or air-currents sets afloat, to permeate every available cubic inch of the "natural atmosphere," in every room in the house. Even if those whose waning energies show the subtle but sure deterioration going on be temporarily sent to the mountains or on sea-voyages, they must spend much of their time in cramped and unventilated hotels or dwellings, or in the crowded cabins of noisome steamships, where no breath of "natural atmosphere" is ever tolerated.

Thus pages might be filled with apt and applicable illustrations from everyday life, to prove the necessity for, and adequacy of, an increased proportion of oxygen, in our efforts to overcome the disastrous results of evil influences and untoward surroundings which cannot be wholly escaped in any thickly settled community. Oxygen burns up waste, effete, and deleterious organic matters retained in the system, or taken into the lungs during respiration. It supplies to the blood and tissues one of the chief elements of nutrition. It dissolves and eliminates morbid deposits and infiltrations. It is the one purifier of the blood, *par excellence*. Hence, it is available in nearly every form of chronic disease, and in many acute conditions.

True, there are yet difficulties in the way of its general use, but there is no reason why enterprising practitioners, who are not already too severely overworked, or who are not too shiftless or indolent to incur the necessary preparation and painstaking, should long be without facilities with which to avail themselves of this potent therapeutic agent. Its use has long enough been surrendered to advertising quacks. *It is time the regular profession rescued it from the smirch of charlatanry which has, to some extent, heretofore attached to it.*

Cases Treated.—Continuing my numbers from previously published reports, I proceed with

Case X.—Mrs. S. C——, aged forty-three; married; the mother of four children, the youngest nine. In October, 1883, severe and repeated floodings came on, attributed by her to protracted overstrain, as a laundress, and to the approach of the menopause. The symptoms, however, were quite similar to those of an induced abortion. Pelvic cellulitis supervened, and was followed by a large psoas abscess, which developed slowly, accompanied with intense suffering, including paroxysms of sciatica, hysteria, and an endless host of neurotic disturbances. Omitting details and non-essentials, the abscess was opened February 8, 1884, and discharged two quarts of very fetid pus. Evidently it should have been opened a few days earlier, in fact, during my temporary absence at the meeting of the State Medical Society of that year; but the neighboring practitioner, in whose hands I left the case, either doubted my diagnosis or hesitated to operate until my return.

Phlebitis of the larger veins of the right thigh supervened, probably of pyæmic origin, and the right knee-joint became the seat of severe inflammation. Contraction of the muscles and tendons ensued, with great deformity and total inability to use the limb. Anorexia and vomiting were persistent, the patient became much emaciated and greatly depressed, and altogether the case was discouraging.

As soon as it was feasible (April 27th) she was placed on oxygen treatment. ℞.: O, N_2O, and common air, āā 3 gallons, b.i.d.

May 10th.—General improvement is quite evident. The limb is less swollen and less painful, appetite returning. Treatment reduced to once daily.

May 20th.—Lameness very much better; she can get about the house without crutches and employs herself at housework.

June 10th.—Steadily gaining; does most of the housework for a family of eight. Appetite good. The limb is normal in size.

July 7th.—The improvement has steadily continued. Lameness nearly gone; appetite fairly voracious, and digestion excellent.

August 10th.—Lameness entirely gone. General health better than for some years, she having formerly suffered greatly from chronic dyspepsia. Treatment suspended. (Saw this patient September, 1885, rugged and well.)

Case XI.—D. F. A——, a railway engineer, aged

twenty-eight; single. Sent to me from a distant part of the State by his family physician. Father living, mother died of phthisis at thirty-eight. Says he has always been rugged with the exception of coughs and colds in winter. Admits that he formerly lived a little "fast," and that he had a touch of specific trouble several years ago. A homœopath "cured" two sores (chancres?) on the prepuce several times for him, the last one year ago. On the day following Easter, 1884, while at a circus, a profuse hæmoptysis occurred, suddenly and without warning. He was removed to the nearest physician's office, but bled so rapidly as to lose consciousness, and it was some hours before he rallied sufficiently to be carried home. Arrived here May 8, 1884.

May 9th.—Physical examination developed the following conditions: Figure slightly stooping; weight, 140; chest narrow and barrel-shaped; pulse, 110 and wanting in volume; temperature, 99.9°. On percussion find an area of dulness over the upper portion (not apex) of right lung, 5 × 5 inches. On forced expiration chest measures 30½ inches; on forced inspiration, 31¼ inches, showing an expansive capacity of only ¾ inch. Very loud tubular breathing over the right bronchus. Appetite capricious, the sight of an unsavory dish being sufficient to destroy it at any time.

Realizing the danger of recurring hemorrhages he is placed on a modified mixture of oxygen and nitrous oxide, well diluted with common air, and is cautioned against making any unusual effort when inspiring. Under this restriction he inhales four inspirations of 50 cubic inches each, b.i.d.

May 9th.—7.45 P.M.: pulse, 100. Four inspirations, as above, reduce the pulse to 92 *within two minutes.*

May 10th.—Pulse, 88, after treatment; respiration, 28.

May 11th.—5 P.M.: has just walked half a mile; pulse, before the inhalations, 117; after, 108.

Patient has heretofore been an inveterate smoker, consuming six or eight cigars of an evening. He is astonished to find his appetite for the weed entirely gone, and attributes it to three days' use of oxygen. As I have not before observed this result, further tests are necessary before announcing oxygen as a panacea for the tobacco habit! Dosage, 2 gallons, b.i.d.

May 14th.—Pulse, before treatment, 108; after, 102; and at the end of thirty minutes, 82.

May 16th.—Pulse, before inhaling, 81; after, 76.

May 18th.—Pulse, before treatment, 95; after, 85.

May 22d.—Chest measurements slightly increased, and he can now easily inspire 130 cubic inches at an effort. Can walk five or six miles at a stretch, without much fatigue, and feels very much encouraged. Eats and sleeps well. Pulse, before treatment, 82; after, 88; temperature, 99° F.

May 27th.—Pulse, before inhaling, 108; after, 94. To supply new material for the reparative processes evidently being inaugurated, I place him on Phillips' wheat phosphates, urging plenty of fresh beef, milk, mutton, eggs, and cream, with inunctions of cod-liver oil and glycerine three times a week, at night, to be followed in the morning by a hot bath, medicated with aqua ammonia and borax. He is also directed to imbibe half a pint of hot water before each meal, and at bedtime, daily.

May 31st.—Pulse, before treatment, 108; after three inspirations (five minutes), 96; temperature, 98.9°. There is a mild form of syphilide showing itself on the chest and back. Iodide of potash is added to his treatment, grs. x., t.i.d. Proportion of oxygen increased.

June 2d.—Pulse, before treatment, 84; after, 82; respiration, 24.

June 7th.—Before treatment, pulse 86; after four inspirations, 84. Chest now measures 30½ and 32 inches, a gain of ¾ inch in expanding capacity. Pulse-volume increasing. Dosage increased to three gallons, b.i.d.

June 20th.—Patient steadily gaining; can now inspire 150 cubic inches at an effort; chest measures on forced inspiration 32¼ inches. Dull area is smaller, and the vesicular murmur can be faintly heard over much of it. He can walk ten miles or more a day without fatigue. Treatment suspended, a pressure of summer travel requiring him to return to his post, promising to return in the fall. Weight, 145 pounds.

September 5th.—Returns, as per promise, weighing but 133 pounds. Has had no second hemorrhage. Pulse, 88; temperature, 98.8°. Chest measures 29½ and 31 inches. Dry tubular breathing over right bronchus. The eruption is nearly gone.

October 1st.—Tubular breathing still distinct, but smoother. Area of dulness much smaller. Order Phillips' wheat phosphates with syr. pruni virg. and tr. nucis vom. Chest measures 29¾ and 31¾ inches. Temperature, 98.9°.

October 24th.—Dulness nearly gone. Eats and digests well. Pulse, 90, and quite full; temperature (8 P.M.), 99°.

November 27th.—Tubular breathing much less distinct. Pulse, 80; temperature, 99°; respiration, 20.

January 4, 1885.—Pulse, 93; temperature, 97.7°; respiration, 20.

February 19th.—Pulse, before inhaling, 98; after, 93.

March 10th.—Pulse, before inhaling, but after excitement, 104; thirty minutes later, after four inspirations, 96. Tubular breathing still audible, but vesicular murmur nearly as loud over the former dull area as elsewhere. Respiration still a little hurried—20 to 22—higher after exertion; but patient eats and sleeps well, weighs 144 pounds, and feels competent to return to his occupation. Treatment suspended. Have heard from this patient during the past summer, and always favorably.

CASE XII.—S. A. C——, merchant, aged fifty-nine. Case of chronic rheumatism, severe dyspepsia, and slowly progressive locomotor ataxia. Oxygen treatment undertaken by means of a portable rubber bag, patient being confined to his bed, and completely helpless. Result of six weeks' treatment, gradual amelioration of all the symptoms. Locomotion became possible by the aid of a cane, and so remains at this writing.

CASE XIII.—Mrs. S. A. M——, aged twenty-six. Disease, severe, chronic, gastric catarrh. Complete recovery, and a gain of fifteen pounds in body-weight, in six weeks.

CASE XIV.—Mrs. H. A. E——, aged thirty. Case of unusually severe chronic constipation of ten years' standing. Family history shows phthisis, which has been both predicted and feared. Result of six weeks' treatment marked general benefit, which continues to date.

CASE XV.—Mrs. W. M. A——, aged fifty-five. An extremely severe case of chronic eczema, complicated with hay-fever and an undoubted *specific* taint. The true nature of the case having been disguised in the beginning, treatment was undertaken and pressed for six weeks, when only moderate benefit being apparent, beyond the relief of the hay-fever and accompanying indigestion, further treatment was refused, the patient being advised to go to the Hot Springs of Arkansas.

CASE XVI.—Dr. A. M——, aged fifty five, came to me suffering from aggravated dyspepsia, with persistent constipation and distressing insomnia. Weight, 130 pounds. Has had inflammatory rheumatism, and one sister died of phthisis. Was placed on active oxygen treatment with nourishing diet—no drugs whatever—and in three weeks gained five pounds in weight, and had an excellent appetite. Constipation relieved and digestion good. Sleeps soundly, and has climbed to the summit of a neighboring mountain, nearly five thousand feet above the sea-level. Is to continue the treatment at home.

CASE XVII.—Mrs. H. W——, aged thirty-seven. Disease, chronic metro-peritonitis and subinvolution, with their usual train of feminine malconditions—dyspepsia, nervous prostration, hemicrania, cough, circumscribed "sore spot" under the left clavicle, etc. Percussion dulness over right apex, with exaggerated resonance over left.

Is placed upon O sixty per cent., N_2O thirty per cent., diluted ten per cent. Of this mixture, two gallons, b.i.d. The first inhalations produce marked sensations, viz., greatly accelerated respiration-rate, *without increasing the pulse-rate;* momentary partial anæsthesia; relief of prevailing migraine.

Mixture reduced to O twenty-five per cent., N_2O thirty-five per cent., diluted forty per cent., of which three gallons at a sitting, b.i.d.

At the end of one month's treatment she returns to her distant home, greatly relieved in every respect. Has gained a little in avoirdupois, more in vivacity; eats and sleeps well, climbs mountains, and has much less chest trouble. Has given up dying with "consumption," and has very little migraine.

Case XVIII.—Dr. K. J——, aged forty. Has been a chronic sufferer from indigestion and "neurasthenia." In one month the indigestion is a thing of the past. He eats the miscellaneous fare of a well-kept hotel with impunity. Has gained five pounds in weight, and says he feels "rested" and much stronger. Can hunt, fish, and climb mountains without great fatigue. Says he feels physically "renovated," and returns to his practice with zest.

Case XIX.—S. C. H——, aged thirty-seven; married; suffering from distressing dyspepsia, insomnia, and decline of virile power. After four weeks of active, but somewhat interrupted treatment, he declares himself a "new man." Was able to sleep soundly all night for the first time in two months after a single treatment—six inspirations. Now sleeps, eats, and digests well, and asserts that his virile powers are all that he could desire! In respect to this latter result, it was a surprise to me, but I have since noted the same revival in a very marked manner in a number of additional cases. The treatment has proved a prompt restorative to this function *in every case since observed*, in which loss of sexual appetite and power, *in either sex*, had been a marked feature.

Case XX.—Mrs. W. M. H——, aged forty-one; a good sample of the "lymph-albuminous" subject referred to by Bartholow. Very short of stature, but weighs one hundred and fifty pounds. Family history shows hereditary tendency to phthisis, rheumatism, and insanity! Suffers from frequent attacks of arthritis and daily recurring "stupid spells," in which it is impossible to keep her from indulging in a lethargic sleep, varying in duration from half an hour to three hours. Subject also to a "bilious" form of indigestion, with "sour stomach," periodic vomiting, and prostrating headaches.

In this case treatment was irregularly and spasmodically followed for several months, relieving the indigestion, and at the same time *reducing the body-weight ten pounds!*

She goes through the whole day without a "sleepy spell," the rheumatism yields with the aid of a little oil of wintergreen; no vomiting and no headaches. From being depressed and indifferent is now ambitious, active, and cheerful.

Two men were quarrelling. One of them threatened to shoot the other. The threatened man, in revival of an old piece of sarcasm, asked: "Where do you bury all your dead?" Just then an excited man drew the satirist aside, and said: "My gracious! you ought not to talk that way!" "Which way?" "Asking that man where he buries his dead." "Why?" "Because he is a physician."—*Ex.*

A New Treatment for Irreducible Hernia.—Dr. Burke reports a case in a man, sixty years of age, of a hernia, supposed to be irreducible, which was replaced during an attack of sneezing. He proposes the employment of snuff in similar cases in the hope that the violent sternutations will break up the adhesions and cause the bowel to slip back.

Clinical Department.

COCAINE IN CIRCUMCISION.

Dr. C. E. Bruce, of New York, communicates the following: The patient was a young man of twenty years, with an extreme phimosis, the prepuce extending about an inch beyond the glans penis and the orifice so small as scarcely to admit a probe. In urinating he had great difficulty, the foreskin would balloon up with the retained urine, which could only pass through the opening in the prepuce in a very small stream. He had prepared himself to be etherized, but consented to the use of cocaine when the probabilities where explained to him. Following the suggestion of Dr. J. L. Corning, "that the arrest of the circulation will prolong and intensify the anæsthesia"—and further, if possible, to secure a bloodless operation for its moral effect upon the patient, he being fully cognizant of his position and able to witness the surgical procedure—the penis was bandaged tightly with a narrow elastic tape, thoroughly compressing the member from the glans to the root. The bandage was then securely tied at the root of the penis, completely shutting off the circulation.

At once hypodermatic injections of about two minims each of a five per cent. solution of cocaine were made in the prepuce, both on its mucous and cutaneous surfaces. The entrance of the needle was scarcely perceptible to the patient—due no doubt, to the pressure of the elastic bandage—and not at all so after the first four or five injections had been made. A few minims were also placed in the meatus and underneath the prepuce, between it and the glans.

In about eight minutes the part was completely anæsthetized, the patient having experienced no pain or discomfort whatever. The foreskin was drawn forward evenly, so as to bring the mucous lining on an equal stretch with the skin, and clamped at the proper distance with long extension dressing forceps. The foreskin was then excised along the forceps, the patient *not having the slightest sensation.* The forceps were removed, when the edges were seen to be precisely and evenly matched in the entire circumference. There was no hemorrhage at all, the hands of the operators not even being soiled. The edges were then brought together by fifteen interrupted sutures, and the skin could then be easily slipped back of the glans.

The piercings of the needle were not felt in the least; at this point the elastic ligature was removed, when a slight hemorrhage followed (by oversight the frænal artery was not secured), but this at once ceased on the application of a firm bandage of iodoform and bichloride gauze with which the wound was dressed. The patient sat up immediately and dressed himself without assistance, went down stairs, and in fact resumed his ordinary avocation.

A few more points of interest:

The anæsthesia remained complete during the whole forty minutes of operation with no other injection of cocaine than the first. Pain did not recur on allowing the circulation to resume, nor for five hours afterward. There was no nervous shock, no disturbance of the stomach, no ill effects whatever. The amount of cocaine used was about two and one-half grains in fifty minims of water. Whether this prolongation of anæsthesia is due to the exsanguination of the tissues alone, thus allowing the contact of the anæsthetic with the sensory nerves to be prolonged and not have it washed out of the parts by the blood-current, and is a consequence of such prolonged contact, more or less profound; or whether it is due to a chemical change in nerve filaments, rendering the insensibility more protracted and hindering the rapid resumption of their sensitive functions, is a matter not yet settled.

Progress of Medical Science.

THE LAWS REGULATING CONTINUOUS EXTENSION AS APPLIED TO THE LOWER LIMBS.—Dr. J. Hennequin has made an exhaustive study of the laws regulating the application of extension to the lower limbs. The following are the conclusions at which he has arrived (*American Journal of the Medical Sciences*): 1. Weights and heavy bodies of a determined value should be employed in extension, to the exclusion of elastic cords, in which the force of extension exerted is too variable and very frequently entirely inefficacious. 2. The apparatus of extension should have its point of resistance upon the skeleton of the mobile segment, in order that the force which it exerts may be of utility. 3. Extension, active force, counter-extension, passive force, are automatic, mechanical, or mixed. 4. Mechanical and mixed extension should be fixed upon that portion of the bone belonging to the less cumbrous, most mobile portion of the limb; counter-extension should be applied to that portion which is firmest and least mobile. 5. The method employed to produce fixation of both portions of the limb should be comfortable and such as will do no injury to the member, and should never extend beyond the limit of the segment upon which they have their points of resistance. 6. In solution of continuity, the point of fracture, and in arthritic disease, the interarticular line, is always the limit and centre of the forces applied for extension. 7. The force of traction must be proportionate to the resistance to be overcome and regulated, so as to render possible an estimate of its absolute power and of the effect produced. 8. The only traction of real value is that employed to overcome constant resistance; any force applied to overcome accidental resistance is entirely futile. 9. The inevitable resistance is represented by muscular tonicity and the elasticity of the teguments; accidental resistance has for its factors diverse elements, among which the principal ones are friction of the segments upon the bed and apparel, and the action of gravity upon the same segments resting upon an inclined plane. 10. The accidental resistance must be annulled or decreased to a minimum, and the mobile segment submitted to extension regulated in such a manner that the influence of gravity may be beneficial or its ill effect entirely obviated. 11. The application of extension and counter-extension to the segments of an injured limb is habitually mediate and rarely immediate; that is to say, that the forces applied generally take their points of resistance upon levers contiguous to those employed to produce motion or immobilization. 12. To direct and scientifically employ an apparatus for extension, it is necessary to know the value in force: 1, of the motor force; 2, of the force transmitted to the mobile segment; 3, of the resistance to be overcome; 4, of the loss experienced by the force of extension; for it is indispensable that this last factor retain, after all loss of power from all causes whatsoever, sufficient efficiency to overcome inevitable resistance. Upon this point the efficiency of the apparatus depends. 13. The value in weight of accidental resistance is impossible to be established, and it is therefore necessary to suppress it or to reduce it to such an extent that it may be disregarded. The inevitable resistance in an adult, whatever may be the development of the muscles or the location of the fracture, may be estimated at or between two and a half and nine pounds, and consequently the force applied to the bone of the movable segment, the efficient force should never exceed nine or be less than four and a half pounds. In the great majority of cases the weight required will be nearer the first extreme than the second. 14. Counter-extension, which should be rather mixed than purely automatic, and never exclusively mechanical, needs only to be employed with a force equal to the traction exerted upon the segment to be immobilized; if this is placed horizontally when the part rests upon a declined plane, the counter-extension bing of necessity exerted against both, the force of extension transmitted by the lax tissues which unite the segments, becomes absolutely imponderable. 15. In the majority of cases it is advisable not to permit the crural portion of the limb to remain completely free; a small trough will exercise direct pressure if it becomes necessary for any reason to adjust the fragments and retain them in position, and the conformation of the limb will be more regular, and the consolidation of the bone more perfect. 16. Apart from special indication, the limb submitted to extension should never be placed upon an ascending inclined plane, but upon a plane either horizontal or slightly declined.

THE INFECTIOUSNESS OF PNEUMONIA.—Dr. R. Massalongo relates the history of a curious epidemic of pneumonia, occurring at Tregnago, a town of two thousand inhabitants in the province of Verona, Italy (*Lo Sperimentale*, August, 1885). The epidemic was not preceded by any special atmospheric changes to which its origin could be attributed, but began in a few houses situated near a pond which served as a place for washing clothes. In most of the houses there were from two to five cases, and the disease attacked the inhabitants of one house after the other in regular succession, never leaping over any. No special predisposition was shown as regards age, sex, or social condition. Of the inhabitants of the hamlet, one hundred were attacked with pneumonia during the epidemic, and thirty died. Numbers of micrococci, such as those described by Klebs, were found in the sputa, but no mention is made of the so-called pneumococci of Friedländer. The course of the epidemic would seem to point to the presence of a contagious influence, yet there are so many other possible explanations of the peculiar march of the disease, that it cannot be regarded as a very conclusive argument in support of the theory of infection.

OPHTHALMIA AND RHEUMATISM OF JOINTS.—Dr. Zatvornitski has published an account of two cases of rheumatic inflammation of joints following ophthalmia. The first was that of a young man who, while suffering from severe urethritis, conveyed the urethral secretion to his eyes. When the ophthalmia was at its height, the wrist became acutely inflamed. The eyes were cured by applications of nitrate of silver. The joint inflammation, after continuing in an acute form for ten days, gradually began to subside, so as to allow of the employment of active and passive movements. The second case was that of a newly-born infant, in whom ophthalmia appeared in one eye. Through carelessness and want of proper attention the affection extended to the other eye, and lasted for about six days. When the ophthalmia was most acute, it was noticed that the right elbow and wrist became swollen and inflamed, and shortly afterward the left ankle. The child's temperature was 104° F., and it was very much prostrated. The joint inflammation continued for some ten days, after which it gradually subsided. The remark is made in reference to these observations, that the first case may be merely an instance of gonorrhœal rheumatism. This would certainly seem the most obvious explanation. May not a similar suggestion account for the second case also?—*Lancet*, September 3, 1885.

THE COLD DOUCHE IN INSOMNIA.—The following is recommended as a very efficacious means of producing sleep in insomnia associated with eruptive or continued fevers: The patient's shoulders are covered with a cloth and the ears plugged with cotton. Then the head being held face down over the edge of the bed, a fine stream of cold water is dropped upon the neck and occiput. The water should fall from a height of eighteen inches during a period of three or four minutes. The head is then dried, and the patient made comfortable in bed. As a general rule, sleep follows in a very short time.—*Concours Médical.*

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THE PRESENT CONDITION OF NATIONAL HEALTH LEGISLATION.

THREATENED as we are with an invasion of small-pox from the north, and of cholera from the east, no occasion would seem to be more opportune than the present for calling the attention both of the medical profession and the public, sharply, to the anomalous condition of national health legislation. We do not need to discuss at this time the need of national sanitary legislation. Whatever diversity of opinion there may be as to the form of such legislation, it may be safely affirmed that, in view of our increasing commercial intercourse with foreign powers, and the facilities afforded for inter-State communication, the necessity for national legislation, through which the sanitary service of the several States may be efficiently co-ordinated is universally recognized. Passing over, then, the agitation of public health questions, which resulted in the establishment of the National Board of Health, which has rendered incalculable service to the country, let us come at once to the present condition of affairs.

Under the Act of Congress approved March 3, 1879, the National Board of Health was established. In accordance with that law the Board is required "to make investigations into, and collect information on, all matters affecting the public health, and to advise the several departments of the Government, the executives of the several States, and the Commissioners of the District of Columbia, on all questions submitted by them, or whenever in the opinion of the Board such advice may tend to the preservation and improvement of the public health." On June 2, 1879, Congress passed an Act enlarging the powers of the Board, and charging it with the duty of aiding State and local boards of health in their efforts to prevent the introduction of contagious or infectious diseases from abroad and their spread from one State to another. It was under the provisions of this Act that the Board co-operated with the health authorities of the Mississippi Valley in stamping out the epidemic of yellow fever of 1879, which made its appearance within a month after the passage of the Act; and again in 1881–82, with the authorities of the North and West, in putting an end to the progress of small-pox, which was rapidly overrunning the country from the Atlantic coast to the Mississippi Valley.

The record of those years is written, and the success which attended the efforts of the authorities, State and National, working hand in hand, established beyond a question both the necessity for national aid in such emergencies, and the wisdom of Congress in providing the legislation by which such co-operation could be secured. From that day to the present State boards of health, local boards, medical societies and associations, have been unanimous in their approval of the work of the National Board and urgent in their appeals to Congress and the President to support and strengthen it in its efforts to improve the health of the people.

The Act of June 2, 1879, took the place of an Act approved April 29, 1878, by which authority in sanitary matters was centered in the Surgeon-General of the Marine Hospital Service, and after defining the duties and powers of the Board, proceeds as follows:

"SEC. 9. So much of the Act entitled 'An Act to prevent the introduction of contagious or infectious diseases into the United States,' approved April 29, 1878, as requires consular officers or other representatives of the United States at foreign ports to report the sanitary condition of and the departure of vessels from such ports to the Supervising Surgeon-General of the Marine Hospital Service; and so much of said Act as requires the Surgeon-General of the Marine Hospital Service to frame rules and regulations, and to execute said Act, and to give notice to Federal and State officers of the approach of infected vessels, and furnish such officers with weekly abstracts of consular sanitary reports, and all other acts and parts of acts inconsistent with the provisions of this Act, are hereby repealed.

"SEC. 10. This Act shall not continue in force for a longer period than four years from the date of its approval."

In consequence of the provisions of this last section the duties of the National Board, so far as they were set forth in the Act of June 2, 1879, ceased on June 2, 1883, and since that date the Board has continued its operations under the Act of March 3, 1879.

In regard to the Act of June 2, 1879, the late Hon. Charles J. Folger, then Secretary of the Treasury, in his Report to Congress for the year 1883, used the following language:

"On June 2d last the Act of June 2, 1879, to prevent the introduction of contagious or infectious diseases, expired by limitation. There is now no legislation immediately to the same end. Whether there be need of reenacting any or all of the provisions of the Act of June 2, 1879, it is for Congress to determine." The decision of Judge Folger was in accordance with Section 12, Revised Statutes, edition of 1878, which reads as follows:

"*Whenever an act is repealed, which repealed a former act, such former act shall not thereby be revived, unless it shall be expressly so provided.*"

In the face of this provision of law, a circular has recently been issued from the Treasury Department, citing the law of April 29, 1878, and assuming it to be in force.

This circular emanates from the "Office of the Supervising Surgeon-General, U. S. Marine Hospital Service," is signed by that officer, and is approved by the Secretary of the Treasury and the President. A more flagrant instance of assumption of power and authority, under color of law, cannot well be conceived. Acting under

the provisions of this *repealed* law, the Surgeon-General proceeds "to frame rules and regulations, and to execute said law," and the Secretary and President approve his acts. Meantime the National Board of Health, the only national health authority now recognized in law, is entirely ignored by the department which it is required to advise on sanitary questions.

In view of the preceding facts it is apparent that national health legislation is sadly in need of revision, and we trust that, at the approaching session of Congress, such definite action will be taken as will determine positively the kind of central organization which we shall have, and the exact nature and scope of its duties. The danger of leaving the great and all-important question of the prevention of epidemics, such as cholera and yellow fever, to the discretion of the President, has been demonstrated by the ridiculous efforts which were made under his direction to control yellow fever in Texas, and the feeble measures now in operation to protect the country against small-pox. Fortunately, neither cholera nor yellow fever has reached us this year, and time is once more given to set our house in order. No proper effort should now be spared by the American Public Health Association, which is largely responsible for whatever national legislation we have, to secure its revision, and to remedy its manifest defects.

A PLEA FOR THE OLDER PHYSICIANS.

We print with pleasure the following note from an esteemed correspondent:

"Dear Mr. Editor: I have seen a great deal in medical journals about struggling young doctors, and the persecutions and hardships and injustice which they suffer. But can there not be a word said for the older men? Have we not also some hardships as well as some rights and privileges. I have been practising now, in a country town of fair size, for twenty-five years. When I began there were five physicians here, now there are twelve, several of whom belong to the class of the much-abused young doctors. I had to work hard for years to gain a standing and a lucrative practice here. I have got it, but I also have a family to support, and I still need all the money that I can honestly earn. But a new young doctor comes in here every now and then, and assumes at once that he 'knows it all,' and is just as much entitled to a living as I am. If I do not welcome him with all my heart, or try and thrust cases upon him, is it very strange?

"In my experience these poor, struggling young doctors are more eager to adopt new ways of gaining practice, more eager to advertise, and to worm their way into new families than we older ones ever were. Sometimes we are almost forced out of practice by these new bustling, business-like ways of the 'poor struggling youngsters.' There would not be much left for us, certainly, if we at once lent a hand to set them up in practice.

"Yours respectfully, ———."

Our correspondent has called attention to a veritable condition of affairs, and pleads his cause so well that we need add but little. We quite agree that a physician who has worked faithfully for a quarter of a century, acquires a certain amount of moral right to his ground, provided he has won his way by good work. Unfortunately, though much can be said, little can be done. Young doctors have studied medicine and received diplomas, with the impression that their education and their sheepskin entitle them at once to a living. They settle down for practice with this idea. When patients do not come to them, but go to the older man, they feel it as an injustice which justifies them in adopting energetic tactics.

A few remedial measures may be adopted now, however. For example, the older physicians need not be so ready to encourage any one who is likely to be their office-student, to study medicine. And again, more attention should be paid to ethical teaching in our medical colleges, and to informing young students of the proper mode of dealing with their fellow-practitioners.

ASPIRATION OF THE AORTA.

Mr. J. Dacre reports, in the Bristol *Medico-Chirurgical Journal*, "a case of sudden pulmonary congestion relieved by aspiration of the aorta," the aorta being aspirated by mistake instead of the right auricle. The patient was a man forty years of age, who had had some phthisical symptoms for a year. He was brought to the Bristol Infirmary suffering from a sudden and acute attack of pulmonary congestion and œdema. His symptoms were great lividity, cold extremities, a feeble, rapid pulse, and great dyspnœa. Loud gurgling râles were heard over the chest. His condition steadily grew worse until the patient became pulseless and apparently *in extremis*.

As there was apparently next to no systole of the heart, and no distention of superficial veins, it was determined to relieve the venous engorgement of the lungs and right side of the heart by tapping the right auricle itself.

Accordingly, a medium-sized needle and canula was inserted in the fourth intercostal space on the right side, close to the edge of the sternum, and passed straight through the intercostal tissue until it was felt to be in the chest; the point of the needle was then turned sharply inward under the sternum, and pushed in that direction for about an inch and a half, when it was felt to be in a cavity. On removing the needle, blood jetted from the canula and thirty ounces were withdrawn. For two hours the patient was more comfortable. He then began to sink again. Aspiration was repeated in four hours and sixteen ounces of blood drawn. This caused no relief, and the patient died about half an hour later. Post-mortem examination showed that the needle had passed immediately above the right auricular appendix and pierced the anterior surface of the aorta about a fourth of an inch above one of the semilunar valves. There were two ounces of blood in the pericardium.

We give considerable space to the foregoing because cardicentesis is a novel procedure, and one of which little is yet known. So far, the operation has not established itself in any wise as one which will help when all other resources are exhausted. It appears, in fact, probable that phlebotomy is better and as efficient. Still, on the other hand, experience so far shows that cardicentesis is not dangerous.

One practical point brought out, according to Mr. Dacre, is, that to reach the right auricle the needle should be inserted in the fourth intercostal space on the right side, near the sternum, and should be passed directly back.

THE ARSENIC HABIT.

We have, every now and then, to chronicle the existence of a new morbid habit. One of the newest and probably rarest, in this country at least, is the arsenic habit, a case of which is reported by Dr. T. D. Crothers, in the *Quarterly Journal of Inebriety* for October. The patient was an Englishman by birth, and a horse-jockey by occupation. He had led an irregular life and had probably drank considerably. He began to take arsenic about the year 1875, using it for the purpose of keeping off fevers. For five years he took from one to two drachms of Fowler's solution daily, and his general health continued good. From this time he gradually increased the dose until he was taking from twelve to twenty grains of arsenic daily (!), either in the form of the powdered acid or of Fowler's solution.

When seen in 1885, his appearance was that of good health, the face full, the skin clear and white, the eyes brilliant but unsteady, cutaneous sensibility was diminished, the appetite was poor, the action of the bowels irregular, and the heart was enlarged. There was no muscular weakness, but the gait was slow and hesitating. His sleep was broken, and he awoke mornings with a sense of exhaustion, which continued until he had taken his dose of arsenic. He complained of failure of memory, was very emotional, and showed evidences of eccentricity and mental weakness. There was a strong, offensive odor coming from the skin, apparently due to the elimination of arsenic.

Dr. Crothers' case is one of a unique character, and we regret that he did not use more care in substantiating his facts. It is generally admitted now that the practice of eating arsenic exists among the Styrians, and in certain parts of India, but even the most inveterate arsenic habitués of these regions do not take doses of more than two or five grains. The statement that a patient takes twenty grains daily certainly needs very strong corroboration.

Dr. Crothers states that, from correspondence with other physicians, he is led to believe that the secret use of arsenic is rapidly increasing. However this may be, it is pretty certain that the practice of taking twenty grains of arsenious acid daily will never become widely popular.

THE ETHICS OF CRANIOTOMY.

In cases of contracted pelvis, or in cases in which there is some other mechanical obstacle to the passage of the fœtus, four measures of relief are possible: the induction of premature labor, version and forceps, craniotomy, and Cæsarean section. There has been of late years considerable change in the feelings with which these various measures have been regarded. In the first place, a more careful study and examination of the patient has led to more frequent recognition of pelvic deformities, and hence the adoption of premature labor as a means of saving both mother and child. On the other hand, the increase of skill in obstetrical manipulation and in abdominal surgery has led to more frequent successes in the extraction of the unmutilated fœtus. Statistics show that craniotomy is a serious thing to the mother, perhaps almost as serious as Cæsarean section, when the latter operation is performed outside of hospitals. The country practitioner, if he understands the value of antisepsis in surgery, may often get better results by Cæsarean section than by attempting to drag the mutilated fœtus through a passage two and a half inches in the conjugate.

The tendency at present is, therefore, to limit the indications for the performance of craniotomy. This is certainly very gratifying, for the operation of craniotomy upon a living child is a thing from which every physician shrinks with feelings of profoundest dread.

The question has recently been raised, however, whether craniotomy upon the living child should ever be performed, or taught in the schools. The Roman Catholic Church has considered the matter, and one of its societies has pronounced against it. Some time ago the Archbishop of Lyons sent a letter of inquiry upon this subject to the Congregation of the Holy Office, at Rome, otherwise known as the Holy Roman Inquisition.

The following answer was received:

"Most Eminent and Reverend Lord: The most eminent, the Inquisitors General, in congregation assembled, on the 28th of the present month of May (1884), took under consideration the questions propounded by your eminence, to wit: 'Whether in Catholic schools of medicine the operation known as craniotomy may be taught, and under the following conditions, to wit: when this operation is omitted both mother and child may perish; but with the operation the mother's life may be saved, the infant alone perishing.' Having thought long and earnestly upon the subject, and having read those things which have been written thereon by learned Catholics (and which were forwarded to us by your eminence), we must answer that this thing cannot safely be taught (*tuto doceri non posset*); which response having been submitted to the Holy Father, and by him confirmed, I transmit to your eminence. Kissing your hands most humbly, I am your eminence's most humble and obedient servant.

"(Signed) Rev. Cardinal Monaco."

It would appear from the above that Catholic obstetricians are morally debarred from performing the operation of craniotomy upon the living child, even to save the mother's life.

This view is a logical and consistent one from the Catholic standpoint. It is not, however, that which physicians have always been taught, nor does it seem to us to be in harmony with the best and broadest ethical instincts.

THE REVIVAL OF THE USE OF MURIATE OF LIME.

Few substances, writes Dr. R. W. A. Crighton, in *The Practitioner*, really possessing marked therapeutic powers, have had more turns on the wheel of fortune, or, more correctly, of fashion, than the old muriate of lime—the modern chloride of calcium. First employed by the French physician Fourcroy, as also by several Dutch and German physicians during the last century, it does not appear to have been much used in Great Britain till

near its close, when strong testimony as to its efficacy in scrofulous affections was given by Dr. Beddoes; Dr. Wood, of Newcastle; Drs. Sanders and Hamilton, of Edinburgh; and Dr. Anthony Todd Thompson. Soon, however, disparaging statements as to its therapeutic powers were made by Professor John Thomson, of Edinburgh; Mr. Benjamin Phillips, and Mr. Samuel Cooper, of "Surgical Dictionary" celebrity.

These great names prevented many from giving the drug a fair trial, and it gradually fell into disuse, till, in 1848, Dr. Neligan, in his valuable work "On Medicines" almost refuses it any therapeutic recognition.

This neglect may also, in a great measure, be attributed to the introduction of the preparations of iodine by Coindet, of Geneva, in 1820, and to the powerful advocacy of cod-liver oil by John Hughes Bennett in 1841.

But during this time the remarkable powers of chloride of calcium were being patiently investigated by at least one individual, the elder Begbie, who bequeathed his large experience and rare therapeutic instincts to his son, the late Dr. Warburton Begbie. In 1872 the younger Begbie wrote an elaborate paper (*Edinburgh Medical Journal*, July) on its therapeutic action, in which he confirmed and extended its value in scrofulous and allied affections. Since that time the only contribution of similar value has been from the pen of Dr. Sinclair Coghill, of Ventnor, in the *Practitioner* for October, 1877.

Dr. Crighton himself now contributes the results of his experience with the drug. He has used it, he says, for years, and is confident that it has a distinct therapeutical value. Its use is indicated in scrofulous affections, and more particularly in glandular enlargements of the neck in children, where the glands are massed together, have an almost stony hardness, and do not yield to iodine and cod-liver oil. The lime salt is sometimes equally efficacious after suppuration has occurred. In scrofulous caries it has also produced remarkable results. In pthisis the remedy is not very efficacious.

Chloride of calcium is probably both a vascular tonic and a bone tonic. It is given in doses of gr. x. to xv. for adults, the crystallized salt being dissolved in syrup.

MEDICAL LECTURES TO LADIES ONLY.—We have before commented upon an obvious and painful tendency to irregular and quackish practices on the part of medical women. It could only occur, we venture to say, to a lady homœopath to keep herself before the public by lecturing "to women only" on the sexual relations. The annual visitation of a scientific lady, who is in this particular line of business, occurs, we believe, at about this period. We have no desire to question the motives or doubt the eloquence and delicacy of the gifted medical lecturess. We are very decidedly of the opinion, however, that public lectures on the sexual relations do more harm than good, and that it is little less than an impertinence to have tickets and circulars bearing on the subject thrust into the hands of wives and daughters.

DISTILLED WATER AND TURPENTINE are said by Dr. Ralfe to be very efficient remedies for renal calculus.

News of the Week.

MORE MEDICAL COLLEGES.—St. Paul and Minneapolis are each thriving cities, but evidently very unhealthy. We infer this from the fact that between them there are now three new medical colleges, with well-equipped faculties, consisting of a total of sixty-odd professors, while each college seems to be supplied with an enormous amount of clinical material. Minnesota is a great State, having nearly as many inhabitants as Philadelphia, and rather more than Brooklyn. There is no reason why it should not have a medical college, but is not three a little excessive for cities which five years ago, together, had only 80,000 inhabitants? In this connection we take the opportunity of chronicling, on the authority of the *Medical Annals*, the prospective organization of another new medical college at Wichita, Kan.

DR. H. C. FESSENDEN, of Eastport, Me., a brother of William Pitt Fessenden, died October 22d, aged sixty-six years.

BEQUEST FOR THE ERECTION OF A HOSPITAL.—The late Colonel Thomas M. Pierce, President of the Texas, Houston & San Antonio Railroad, made a bequest in his will of such a sum as his trustees may deem necessary, providing it does not exceed $20,000 to establish a charitable hospital on the line of the Sunset Route Railroad in Texas.

THE EARLY CONTAGIOUSNESS OF THE INFECTIVE EXANTHEMS.—M. Lancereaux, in a recent communication to the Académie des Sciences, stated that a series of facts, collected in his hospital wards, convinced him that small-pox, measles, and scarlet fever were transmissible from the onset. The period of incubation varied; it was from eight to ten days in inoculated small-pox; from ten to twelve in spontaneous small-pox. A mild form of small-pox might, by transmission, provoke a violent or a mild form.

SMALL-POX AND THE GOSPEL.—The Salvation Army at St. Catherine's, Ont., have spread small-pox more than they have the gospel, and it is proposed to burn their barracks.—*Sanitary News.*

BEQUESTS FOR HOSPITALS.—We learn from the *Boston Medical and Surgical Journal* that the will of the late Mary G. Perkins contains bequests of $10,000 each to the New England Hospital for Women and Children and the Children's Hospital.

ANOTHER RESIGNATION FROM THE CONGRESS.—Dr. George W. Major, of Montreal, has declined to serve on the Council of the Section of Laryngology.

ST. PAUL is to have a small-pox hospital. Minneapolis will, therefore, soon have two, if we understand aright the generous rivalry between these two great cities.

THE ELEVENTH CONGRESS OF THE ITALIAN MEDICAL ASSOCIATION, writes a correspondent of *The Lancet*, just held at Perugia, was in some respects more memorable than the most brilliant of its predecessors. Concurrently with its meeting the Royal Italian Society of Hygiene was to have been convened at Turin, but the promoters of these congresses, to obviate the inconvenience of two closely connected programmes being

carried out the same week in different parts of the peninsula, agreed to combine their forces and to have one assembly in common. The hygienists accordingly held their discussions in the Section of Public Sanitation, which the Medical Association always includes in its programme, the Umbrian capital being the rendezvous. The proceedings extended over so vast a field that we can only indicate a few of the subjects in which special interest was taken, subjects chiefly introduced by the representatives of the Florentine "Istituto di Studi Superiori." Professor Chiari read a very original paper on "Recent Advances in Operative Surgery," and Professor Tafani on "Some important Contributions of Microscopy to Medicine." Electricity, as became the fatherland of the science, especially in its bearings on therapeutics, came in for a large share of attention, chiefly at the hands of Dr. Turchini and Professor Dall'Eco, who exhibited electrical apparatus of a very ingenious and practical kind. The admirably appointed museum, which was a prominent adjunct to the Congress, was particularly rich in models of ambulance service and field hospitals; while invalid cookery had a department to itself, and the orthopædists and gynæcologists had their special wants supplied in several new and effective additions to their *armamentaria*. Nor must we omit mention of the startling specimens of animal petrification contributed by the veteran Dr. Comi, who, since 1834, has shown in a hundred different ways how human cadavera can be utilized for the manufacture of tables, desks, and such-like furniture, of exceptional solidity and elegance.

The First Circular of the Collective Investigation Committee of the International Medical Congress has been issued by the American members. It is neatly printed, bound in fashionable note-paper, and presents an attractive appearance. The names of the American members, N. S. Davis and A. Jacobi, are imprinted amicably side by side, and no one would believe that one had figuratively taken the other by the top of the head and incised his throat. The Committee begin their investigations with inquiries into the geographical distribution, prevalence, and etiology of rickets, acute rheumatism, chorea, cancer, and urinary calculus. Blank forms are sent which are to be filled out in a manner indicated by the context. As to the character of the questions and the selection of topics we shall have something to say later. Meanwhile we earnestly urge our readers to do all they can to further the work of the Committee. The papers are to be kept during the ensuing year, and the records handed in by January 1, 1887.

New Medical Faculties in Russia.—The Council of the Odessa University has commissioned the Physico-Mathematical Faculty to prepare plans for the establishment of a medical faculty. The rector has visited the St. Petersburg clinics, and has presented his report to the faculty. The university architect is to be sent to St. Petersburg and Kieff or Vienna in order to become acquainted with the arrangements of the university buildings in those cities. The original cost of the new medical faculty is estimated at £124,000, and the annual income necessary at £12,000. The present medical school in St. Petersburg, which is exclusively connected with the medical department of the army, is about to undergo several changes, so as to become somewhat similar to the medical faculties of the other universities.

A New and Jennerian Function for the Mosquito.—Dr. Carlos Finlay, of Havana, has published the results of several experiments he has made on the inoculability of yellow fever. He performed the operation, or rather got it performed for him by mosquitoes, which he caused first to sting a patient suffering from yellow fever, and shortly afterward a healthy person who was to be (with his own consent of course) the subject of the experiment. He found that the disease was only inoculable from the third to the sixth day. When two mosquitoes were employed, so that a double dose was given, the symptoms of the experimental disease were somewhat more severe than when only a single mosquito was used. Of eleven cases of inoculation, six were efficacious, one doubtful, and four negative. The period of incubation varied from five to fourteen days; the symptoms consisted of headache, pyrexia, injection, with sometimes an icteric tint of the conjunctiva, and in some cases albuminuria. The fever lasted, as in the ordinary form, from five to twenty-one days. The author believes that this method of producing artificial yellow fever will ultimately be found very valuable as a prophylactic against the natural and dangerous form of the disease.

The Reach of Quackery.—There is nothing, short, perhaps, of actual damnation, which some people will not believe quack medicines can prevent or cure. Just now in papers in Maine and other places exposed to the small-pox we find an advertisement alleging that "a sure preventive" of small-pox may be found in a certain quack doctor's pills.

A Montreal Physician on Vaccine. — My experience with vaccine has been large. I have used, I believe, samples of every kind that has yet been brought into Montreal, and some that I trust never will be sold here, and I think my successes and my failures have made it possible for me to say with positiveness that vaccinating in hot weather with vaccine brought from a distance is a delusion and a snare. I will never do it again, for I believe that it has done the cause (it is a "cause" in this city) a great deal of harm. It is difficult to persuade people of the utility of being vaccinated after the third or fourth failure, when they have been taught that two or three failures is sufficient to insure immunity from the disease. During the cold months I hope to vaccinate all but a small fraction of my patients that shall require it. We ought to have a properly conducted vaccine farm here, and I believe it would pay. During the next year or two (while King Variola holds sway) not less than 1,000,000 points will be required for Montreal and its surrounding country, and probably $75,000 will be paid for vaccine.—Dr. P. A. Laver, in *Can. Med. Record.*

Death of Professor Samuel G. Armor, M.D.—Professor Samuel G. Armor, Dean of the Faculty of the Long Island Hospital Medical College, died October 27th, at his home, in Brooklyn. He had been seriously ill only since Saturday. Dr. Armor joined the Faculty

of the Long Island College in 1866, as Professor of Therapeutics, Materia Medica, and General Pathology. The next year he succeeded Dr. Austin Flint, who had resigned, in the Professorship of Practice of Medicine and Clinical Medicine. From that time until the end of the last Spring term he attended steadily to college duties. He was a frequent contributor to medical literature, and built up a large practice in Brooklyn. Before moving to Brooklyn Dr. Armor had gained a reputation as an instructor in medicine, through connection with Western medical colleges for nearly twenty years. He was a practitioner at Rockford, Ill., for three years, beginning in 1844, and was then engaged for a course of lectures at the Rush Medical College of Chicago. In 1848 he became Professor of Natural Sciences at Cleveland University. In 1853 he became Professor of Physics and Pathology in the Ohio Medical College at Cincinnati. Three years afterward he was called to the Chair of Pathology and Clinical Medicine in the Missouri Medical College, his Alma Mater, at St. Louis. He remained there until 1861, when he went to Detroit as Professor of Institutes of Medicine and Materia Medica in the University of Michigan. It was from that post that he was invited to Brooklyn, in 1866.

THE AMERICAN GOVERNMENT AND QUARANTINE.—Another illustration of the peculiar way in which our country has to deal with matters of quarantine is furnished by Texas. This State determined last summer to avoid the importation of yellow fever from Mexico, if possible. It, therefore, established a strict quarantine along its Mexican border. This quarantine was so disagreeable and vexatious to the Mexicans that that Government made a complaint to the National Government at Washington. As the result of this, Secretary Bayard sent a mild remonstrance to the Governor of Texas, which has been vigorously replied to. The Texan Governor concludes by saying that, "With all due respect to the Mexican Government I desire to say that Texas must be her own judge of the time and place for establishing quarantine for the protection of her people." The borders of our country are protected at some points by cities, at others by States, at others by the National Government, and at others not at all. "Here's a how-de-do," which our forefathers did not clearly foresee or wisely provide for.

TOO LARGE DOSES OF BELLADONNA AND OXALATE OF CERIUM.—In an item quoted from the *Therapeutic Gazette* (on page 460, MEDICAL RECORD of October 24th) some errors occur in regard to the dosage of belladonna and oxalate of cerium. Every one who knows anything of either drug will see at once that fifteen grains of the extract of belladonna should never be given in one dose, even to an adult, much less a child. The usual dose of belladonna for an adult is from one-fourth to one-half a grain. Again, oxalate of cerium is advised in doses of forty-five grains to a child one year old, and four drachms for a child seven years of age. The proper dose of oxalate of cerium is one to two grains.

THE AMERICAN ACADEMY OF MEDICINE.—The Ninth Annual Meeting of the American Academy of Medicine, was held during Wednesday and Thursday of this week, at the New York Academy of Medicine. Dr. Albert L. Gihon, Medical Director of the United States Navy, President of the Academy, called the meeting to order, and the opening prayer was offered by the Rev. Dr. Henry J. Van Dyke. Drs. S. M. Nelson, of Cambridge; J. H. W. Chestnut, of Philadelphia; Rufus W. Bishop, of Chicago; E. E. Mariot, of Springfield, Mass.; G. N. Acker, of Washington; H. V. Logan, of Scranton; H. W. Elmer, of Bridgeton; E. W. Cushing, of Boston; J. S. Wright, of Brooklyn; W. Osgood, of Yarmouth; C. A. Packard, of Bath, Me.; M. K. Oaks, of Auburn, Me.; A. Mitchell, of Brunswick, Me.; D. A. Robinson, of Bangor; C. A. Ring, of Portland; J. A. Spaulding, of Portland; G. W. Marshall, of Milford, Del.; W. A. Hugie, of Charleston; J. B. Shapley, M. H. Post, A. E. Briggs, and J. S. Alleymen, of St. Louis, and W. S. Davis, Jr., of Chicago, were elected Fellows of the Academy.

Dr. Robert Lowry Sibbet, of Carlisle, Pa., read a paper on "The Study of Medicine as a Means of Education;" Dr. Charles McIntire, Jr., of Easton, Pa., presented a paper on "Medical Supervision in Student Life;" Dr. Henry O. Marcy, of Boston, Mass., one on "Western North Carolina as a Health Resort;" and Dr. E. H. Sells, of this city, spoke of "The Importance of Climatology Considered as a Regular Branch of Study in Medical Colleges."

At the Wednesday evening session, Dr. Albert L. Gihon delivered a scholarly and eloquent address on "What is Medicine?" an abstract of which, together with the proceedings of the Academy in full, will appear in our next issue.

The following officers were elected for the ensuing year: Rhodes Stansbury Sutton, of Pennsylvania, President. Lewis P. Bush, of Delaware; S. J. Jones, of Illinois; R. Lowry Sibbet, Pennsylvania; Frederick H. Gerrish, Maine, Vice-Presidents. Richard J. Dunglison, Pennsylvania, Secretary and Treasurer. Charles McIntire, Jr., Pennsylvania, Assistant Secretary. The Committee recommended Pittsburg, Pa., as the next place of meeting.

Reviews and Notices.

COMPARATIVE ANATOMY AND PHYSIOLOGY. By F. JEFFREY BELL, M.A. Illustrated with 229 Engravings. Philadelphia: Lea Brothers & Co. 1885. Pp. 555. Manuals for Students of Medicine.

THE conventional practice of teaching medical students *human* physiology instead of *physiology* is unquestionably a wrong one. It tends to narrow the student's view and make of him a memorizing mechanism, instead of giving him sound notions of what biological science really is. For this reason we welcome a work like the present, of which our text-book literature is much in need. For Professor Carpenter's work is now old and too bulky, while Bradley's is mainly a compend for cramming. Mr. Bell writes modestly in his preface as to the methods and character of his work. His method, however, which, is that of tracing the physiological history of the different organs or systems through successive animal forms is the correct one. He has, we think, erred in filling up his chapters with too many illustrative types, and consequently too many technical zoölogical names. We speak here in behalf of the medical student, who would, we feel sure, get a little dazed in going over the work. Mr. Bell has furnished a very large number of fine illustrations which contribute to the attractiveness of the book.

ACNE: ITS ETIOLOGY, PATHOLOGY, AND TREATMENT. A Practical Treatise Based on the Study of One Thousand Five Hundred Cases of Sebaceous Disease. By L. DUNCAN BULKLEY, A.M., M.D. Pp. 280. New York and London: G. P. Putnam's Sons. 1885.

DR. BULKLEY offers to the profession a book admirable in every particular. Its typography, its plates illustrative of microscopical studies, its tables, its arrangement and discussion of the subject under consideration, the complete bibliography, all give satisfaction to the reader, and make him feel that he has the book that he wishes on the subject, and not one which has been built upon the foundation of other works which he would rather consult for himself.

"Acne is one of those diseases which, while not causing physical suffering as a rule, can yet occasion an amount of real distress and annoyance which may often be much more unbearable than even a considerable amount of pain; and although it may never endanger life, it often can and does render existence so miserable that some individuals badly afflicted with it have even wished to die," writes the author; and many a physician can corroborate this statement. To relieve this condition, therefore, is worthy of high endeavors, and he who undertakes the task will feel grateful to Dr. Bulkley for having put the results of his vast observation and extended experience at his command.

PRACTICAL THERAPEUTICS: A COMPENDIUM OF SELECTED FORMULÆ AND PRACTICAL HINTS ON TREATMENT. By EDWARD J. BERMINGHAM, A.M., M.D. 4to, pp. 420. New York: J. R. Bermingham. 1885.

THIS volume is, as its name implies, a collection of prescriptions from all quarters for use in disease. It is interleaved and has well-arranged indices. It is handsomely printed and will doubtless suggest many devices to be followed where the usual plans fail.

Reports of Societies.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

Eightieth Annual Meeting, October 26, 1885.

DANIEL LEWIS, M.D., PRESIDENT, IN THE CHAIR.

OFFICERS FOR THE ENSUING YEAR.

President—Dr. Daniel Lewis.
Vice-President—Dr. Laurence Johnson.
Secretary—Dr. Wesley M. Carpenter.
Assistant Secretary—Dr. Charles H. Avery.
Treasurer—Dr. Orlando B. Douglas.
Censors—Drs. F. R. S. Drake, H. T. Peirce, William O. Moore, F. M. Weld, and W. E. Bullard.

(Drs. W. T. Alexander and H. B. Conrad served as tellers.)

The Treasurer's Report showed a balance in the treasury of nearly four hundred and fifty dollars.

The Report of the Special Committee on Contagious Ophthalmia in Asylums and Residential Schools, was read by DR. R. H. DERBY, and contained evidence confirmatory of reports already made and published.

The Report of the Committee on Ethics stated that the six cases before the committee had been amicably settled.

The Report of the Committee on Prize Essays made known the fact that no essay had been offered during the past year.

The Report of the Board of Censors was read by DR. DRAKE, Secretary of the Board, and was accompanied by the report of Counsel William A. Purrington, Esq. These papers showed that the litigation for the suppression of quackery, in which the Society had engaged during the past year, had been reasonably successful. The proceedings instituted against the Eclectic Medical College of New York City had terminated by settlement, the College paying to the Society the sum of $1,500, and consenting to an abridgment of its powers, so that it can no longer confer *honorary* or *eundem* degrees; thus destroying a channel through which it might be possible to grant diplomas illegitimately.

AMENDMENTS TO THE BY-LAWS.

The following, proposed by DR. A. JACOBI, was unanimously adopted:

"That the *Comitia Minora* be directed to recommend no applicant for admission to membership unless he be a graduate from a Medical College in good standing, or a licentiate of a regular unsectarian State or County Medical Society of this or any other State; *or, if his diploma or license* be of a sectarian character, unless the applicant declare in writing his or her abnegation of sectarian principles and practice."

The following, recommended by the *Comitia Minora*, gave rise to a lengthy discussion, and finally were adopted:

"The annual dues shall be the sum voted at each annual meeting, but not exceeding five dollars.

"The annual dues shall be payable in advance after the annual meeting.

"They shall be remitted, for the year in which they join, to those who join the Society in the months of September and October.

"If any member shall fail to pay the yearly dues within thirty days after the fourth Monday in November, when the same shall become payable, it shall be the duty of the Treasurer to serve, in the manner in which notices in suits are required to be served on attorneys, upon each member so in default, a copy of this By-Law and a notice to the effect that, unless such dues are paid within fourteen days thereafter, his name and the amount due by him will be reported to the Society at its next succeeding stated meeting, and entered upon the minutes; and if they are not so paid, the Treasurer shall report the same accordingly. At the next stated meeting of the *Comitia Minora* after the date of such report, the *Comitia* may, by order, without further notice, strike from the roll the name of any member continuing in default, and he shall thereupon cease to be a member of the Society, provided that, upon his written application explaining such default, and the payment of all dues to the date thereof, or provided that the *Comitia* unanimously remits the arrears, the *Comitia* shall have power to remit the penalty of this By-Law."

The following, offered by DR. H. G. PIFFARD, was also discussed freely, and then referred to the *Comitia Minora* with power:

"It shall be the duty of the Secretary to prepare annually, and send to each member of the Society, a Register containing the names, addresses, and office hours of the active members of the Society—the Register to be prepared at such time, and in such manner, as the *Comitia Minora* shall direct."

The Society voted that the sum of *three* dollars shall be the dues from each member during the ensuing year.

The Annual Meeting then adjourned, to meet on the fourth Monday in November, at 8 P.M.

SALICYLATE OF METHYL.—Salicylate of methyl has been proposed as a therapeutic agent to supersede salicylate of soda. It colors salts of iron violet, is insoluble in water, of a light-yellow shade, and has an agreeable smell. It has been proved to have no effect on cold-blooded animals, except when it is applied in subcutaneous injections in large quantities, at the same time that the animal is breathing air charged with salicylate of methyl. The silver absorbed is partly distributed in the system, and partly discharged by respiration and the other forces of nature.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, October 14, 1885.

GEORGE F. SHRADY, M.D., PRESIDENT, *pro tem.*

MELANO-SARCOMA OF THE SKIN.

DR. JOHN A. WYETH presented a female patient from whom he had removed a tumor of the skin. She was seventy years of age. Fourteen years ago there appeared first, below the left eye, a small cutaneous growth which remained almost stationary for several years, and then enlarged gradually. Four years ago it was removed by some kind of caustic paste. She finally came to Dr. Fox's clinic at the College of Physicians and Surgeons, and by him was referred to Dr. Bronson, at the clinic in Thirty-fourth Street, where Dr. G. T. Jackson also saw the patient. Both confirmed the diagnosis of melano-sarcoma of the skin made by Dr. Fox, and Dr. Jackson referred her to Dr. Wyeth for an operation.

The surgical point of interest in the case was that it illustrated the remarkable vitality of the tissues of the neck and face when extensive portions of skin were raised for plastic purposes, and that this could be done with almost complete impunity. In this case the incision extended from the side of the nose to the outer canthus of the eye, was an inch and a half in length by one inch in width, and yet union by the earliest of all intentions was obtained. Fine carbolized silk was used for sutures.

Microscopical examination of the growth confirmed the diagnosis.

DR. H. J. BOLDT presented a specimen with the following history:

CYSTITIS SUPPURATIVA EXFOLIATA PUERPERALIS—CAST OF THE BLADDER.

Mrs. L. L——, aged eighteen years and eight months, primipara, confined September 18, 1885, of a healthy medium size, male child, in L. O. A. position. Pregnancy and labor were normal. On September 21st, the patient began to complain of colicky pains in the hypogastrium and pains in the lumbar region; both were tender on pressure, but nothing further unusual was noticed on examination. Micturition gave no pain and seemed to be at regular intervals for that period after delivery —four to five times in twenty-four hours; as to the quantity of urine voided during that time he was not positive. The bladder, however, was evacuated by catheter at that time, and about four ounces of urine were withdrawn, which had slightly acid reaction. Specific gravity 1.022, and contained albumen, blood, small quantity of pus, renal tube epithelium, bladder epithelium, and phosphates. Diagnosis: Nephritis catarrhalis acuta hemorrhagica. The temperature varied from 101° to 102.6° F.; these and all subsequent temperatures were taken in the axilla.

On September 26th, the patient began to complain of tenesmus and dysuria; only small quantities of urine could be passed at one time; the straining was severe and continuous. The catheter was again used, when eight ounces of thick, bloody, and muddy-looking urine were withdrawn, which had a putrid ammoniacal odor, alkaline reaction, sp. gr. 1.005, contained albumen, blood and pus in large quantities, shreds of connective tissue, renal tube epithelium, bladder epithelium—all three layers—the caudate-shaped epithelium of the deepest layer predominating. The bladder from this time on was regularly washed out with carbolated water 1 to 150 on account of the existing cystitis. The temperature was 99° F., and did not vary more than one degree either way until October 2d. On the morning of this date, information was given that the patient had spent a very restless night, had had more pain in the hypogastrium than previously, and that she thought something prevented her from micturating—it felt like a small lump near the urethral orifice. The temperature was 101.4° F. On inspection, a small sac-shaped mass, about the size of a bean, was seen protruding from the urethral orifice. A bimanual examination, which was rather unsatisfactory on account of extreme tenderness over the bladder and intra vaginam, revealed an œdematous, very painful swelling on the anterior vaginal wall, just above the symphysis pubis. The position of the uterus, on account of existing tenderness, could not be made out. Turning again to the small mass, which he took to be either a part of the urethra inverted, or the inverted bladder, it was found that it could be easily reduced, and then the viscus was washed as previously. Several hours later he found the sac protruding again, and then about the size of a small walnut, emitting an extremely fetid odor. Feeling almost certain that he was dealing with an inverted sloughing bladder, he became greatly alarmed as to prognosis; it was necessary to reduce the sac, however, before washing the bladder could be accomplished. The temperature was now 103.2° F., but went down to 101.6° F. about an hour after the viscus was cleansed. Early in the afternoon the sac-like mass protruded again, much pain, tenesmus, etc., being present; temperature 103.8° F. The bladder was washed out with short intervals almost continuously, until the temperature was reduced to 101.8° F. Dr. Boldt suggested a consultation, and Drs. W. T. Lusk and W. H. Van Wyck were sent for by the family. Both gentlemen agreed with his views of the case, and the treatment was continued with the addition of dusting iodoform upon the protruding mass.

On vaginal examination, Dr. Lusk thought that the swelling felt by Dr. Boldt, and apparently fluctuating, might be an abscess between the walls of the bladder, but the use of an aspirator did not show this to be the case. The following morning, soon after the bladder was washed, the specimen, which he would call "a cast of the bladder," was discharged, the thick portion of the sac which first protruded being first discharged. Immediate relief was experienced by the patient. The washings at first always contained blood, pus, shreds of connective tissue and muscular structure. The temperature previous to each washing being 101.2° to 101.8° F., always fell from 1° to 1.2°. Incontinence of urine was persistent to the end. To get an idea concerning the quantity of urine voided in twenty-four hours, a bed-pan was placed under the patient, and it was found that one hundred and twenty-eight ounces were passed; specific gravity, 1.002; the same microscopical appearances as previously, only more *muscular* structure could be seen by the naked eye, and verified by the microscope. Throughout the course of the case the urine always contained large quantities of phosphates.

From October 5th something seemed to obstruct the introduction of the catheter at a point, by measurement, 2½ inches from the orifice of the urethra; the instrument could be introduced without causing pain 2¼ inches, and beyond that it gave considerable pain. The patient felt again as though a lump was lying in the urethra and caused much annoyance.

October 9th, 9 A.M.—Patient had spent a restless night, nothing otherwise unusual was noticed; temperature, 101.4° F. At 5 P.M. she was very restless; pulse, 140; temperature, 103.4° F. This apparently sudden change caused him much alarm, and Dr. Lusk was requested to see the patient again. At 8 P.M. the temperature was 104.8° F.; pulse, 150 and feeble. Dr. Boldt thought that probably some loose exfoliated muscular tissue might be in the bladder, giving rise to the obstruction to the introduction of the catheter, and causing the high fever. An examination per urethra disproved this. The remainder of the walls of the bladder were very much thickened, infiltrated, and œdematous, and the cavity much diminished in size. I do not think it could contain more than an ounce or an ounce and a half of fluid. With the exploring finger all sides of the bladder were readily felt, and all parts of the bladder seemed denuded of their mucosa, except just around the internal urethral orifice. A few rough spots on the sides and at the fundus

were also felt; probably from these the muscular tissue came, shreds of which were continuously found in the urine, upon the napkins, and in the washing. Stimulants and antipyretics were used per rectum, as nothing would remain on the stomach. About an hour later the patient began to develop cerebral symptoms.

At 1.30 A.M., October 10th, in spite of energetic treatment, the temperature was 106.4° F.; pulse imperceptible, and cerebral symptoms very marked.

Death took place at 1.10 P.M., October 10th. How high the temperature went just previous to death he did not know. Unfortunately an autopsy could not be obtained.

Dr. Boldt thought it probable that the necrotic process began at the fundus of the bladder. So far as he had been able to ascertain, cases of this kind had not been reported in this country, and but few in Europe. In none of the cases in which the destructive process had advanced as far as in this had the patients recovered.

The cerebral symptoms in this instance were probably due to septicæmia.

The disease had been met with in either the pregnant or puerperal state, and with the exception of one reported by Aveling, of London, and this one, the primary trouble had been, in all the cases reported, retention of urine, due to either displacement of the gravid uterus or neglect in the use of the catheter after delivery. The remarkable diminution in the size of the cavity of the bladder was also an interesting feature of the case.

DR. E. M. CUSHIER presented a specimen of

SARCOMA OF THE OVARY,

removed, post-mortem, from the body of a woman forty-nine years of age, who died in the New York Infirmary for Women. The tumor had been noticed only about one year, and its growth was very rapid. The entire upper part of the vagina seemed to be spread out, drawing up the cervix, and apparently diminishing its length considerably. The immense abdominal mass gave an indistinct fluctuation. The suffering of the patient was so great as to lead to the consideration of the propriety of an operation, and Dr. James B. Hunter saw the case in consultation, who thought it altogether probable that the growth was malignant, but at the same time believed it to be justifiable to give the patient the benefit of the doubt. The patient was exceedingly desirous to have the operation performed, and an exploratory incision was made October 24, 1885. It was very soon ascertained that, on account of extensive and firm adhesions, it would be impossible to remove the tumor, which presented the appearance of a malignant growth. The abdominal wound was therefore closed, and the patient rallied well from the ether; but as soon as she discovered that the tumor had not been removed, she lapsed into a state of despondency from which she did not arouse, and died on the fifth day after the operation.

From the time of the operation until death there was scarcely any elevation of temperature or acceleration of pulse. At the autopsy the tumor was found so adherent that it was impossible to remove it without dissecting away a portion of the muscular tissue of the abdominal wall. The cervix uteri was normal as far as the internal os, but beyond that the entire organ was thickly infiltrated with masses resembling the tumor itself. No left ovary was detected, it being obliterated by the growth. The right ovary was perfectly normal, as well as the corresponding Fallopian tube. There was some enlargement of the retro-peritoneal glands. The liver and spleen were normal. The lower lobe of one lung was in the stage of red hepatization; the other lung contained some nodules which presented the same appearance as did the tumor. There were no rational signs of pulmonary disease.

Microscopical examination showed that the tumor consisted entirely of spindle-shaped and round cells, making it a sarcomatous growth. The nodules in the uterus showed the same spindle-cell and round-cell growth undergoing mucoid degeneration in places, and the nodules in the lung showed round-cell infiltration.

The most interesting question was whether the tumor was originally a sarcoma of the ovary, or a fibroid of the uterus which underwent degeneration. Muscular fibres, such as belong to the uterus, were entirely absent from sections of the tumor; at the same time there was absence of anything suggestive of original ovarian tissue. Dr. Cushier, however, was not at all sure as to its being a real ovarian tumor.

Dr. Cushier also presented a

DERMOID CYST OF THE OVARY

which she removed October 8, 1885. It was interesting from the fact that the patient was confined about three months previous to the operation, and was not aware that she had a tumor until shortly previous to the last pregnancy, when she noticed a swelling about as large as a walnut just above the pubis. After confinement she observed that she did not get smaller, and had several attacks of pain which were referred to peritonitis.

The patient was seen at the infirmary first about the the middle of September, when she was examined by Dr. Daniel, who diagnosticated the enlargement to be due to some form of abdominal tumor. After admission the temperature rose to 101° F., accompanied by pain which required the use of anodynes. Within a week or ten days this attack subsided, pulse and temperature became normal, the general condition of the patient improved, and the diagnosis of cystic tumor of the ovary was made. At the operation, adhesions were found throughout the entire extent of the tumor, but these were broken up with some difficulty, not extreme, however, and the patient was doing very well. After removal it was found that the cyst contained a large mass of hair, a tooth, and a spicule of bone.

DR. T. MITCHELL PRUDDEN thought that in the first case the chances were very much in favor of the tumor having an ovarian origin, from the fact that sarcoma of the ovary is so much more likely to occur than sarcomatous change in a fibro-myoma. Furthermore, the fact that there were no other fibro-myomata favored the view that the growth originated in the ovary, because fibro-myomatous growths were usually multiple.

CONGENITAL CYANOSIS.

DR. L. E. HOLT presented the kidneys, heart, and lungs removed from a case of congenital cyanosis, the child dying forty-eight hours after birth. The history of the family was distinctly syphilitic, and the duration of pregnancy was eight and a half months. The child was a female and weighed from four to four and a half pounds. Respiration on the second day was markedly accelerated, 180, and the pulse was so rapid that it could not be counted. Examination of the heart was made, but nothing could be determined on account of the rapidity of its action. Examination of the lungs revealed over both sides a marked diminution of pulmonary resonance, and the presence of many fine râles. The child was found dead in bed.

The lung was solid, did not crepitate at all, and sank readily in water.

The foramen ovale was large enough to admit two fingers; the ventricles were slightly thickened.

The spleen was enlarged, firm, and showed congestion.

The kidney was slightly softened externally, but it was evident that there was some interstitial increase. The cortex was pale; the pyramids distinct, and contained uric acid infarctions.

With reference to the cyanosis, it was explained by the condition of the lungs, as it did not necessarily follow when the *foramen ovale* was patent, if there was no pulmonary obstruction.

Another interesting question pertained to the kidneys,

as it had been said by Orth that uric acid infarctions was positive evidence that the child had breathed.

The third interesting question was, what influence did the syphilitic history exert in the case?

The Society then went into executive session.

NEW YORK ACADEMY OF MEDICINE.

SECTION IN PRACTICAL MEDICINE.

Stated Meeting, October 20, 1885.

ALFRED L. LOOMIS, M.D., LL.D., CHAIRMAN.

THE CHOICE OF REMEDIES.

DR. LAURENCE JOHNSON read a paper on the above subject. (See p. 478.)

The discussion was opened by DR. W. H. THOMSON, who believed that the author had done good service in calling attention to the necessity of altering our pharmacopœia in the near future in order to keep therapeutics from parting company altogether with physiology and pathology. How was this to be done? His own suggestion would be to see in the first place to what extent the terms now used corresponded to accepted physiology and pathology. For example, to begin with the word tonic, what does it correspond to among the physiological functions of the body? The word originally was taken from music, and accorded with the manner with which a string was put upon the stretch to give it tone. But we are told in applying it that iron is a tonic, vegetables are tonics, a sea-bath is a tonic, and also a sea-voyage is a tonic, and therefore the word really means anything which does good. When, however, we take up the action of remedies we find under this head that a cold shower-bath, which acts only by an external impression, is classed with cod-liver oil, which acts as a food. Of course there can be positively no two operations in these agents which they have in common except that they benefit the patient. So the word tonic comes to mean something which benefits the patient, and the question arises, How can we retain the word very much longer? With the exception perhaps of digitalis and one or two others, there are no cumulative effects in the vegetable remedies. Stramonium relieves an attack of asthma and does this as effectually for ten years as when first taken; but the patient is no nearer to a cure of his disease than when he began its use. With the administration of iron, however, the patient at the end of the twentieth dose is nearer a cure of his disease than after taking the first dose. Hence, he would like to see banished from the Pharmacopœia the word tonic, and with it nearly the whole list of tonics with which the work is now burdened.

So also with the word alterative, and the whole class of alteratives, some of which are contradictory in their action. In the name, and often in the agents themselves, there exist the final remains of old physiological opinions and extinct systems of pathology. He would say that our present Pharmacopœia was in very sad need of an elimination, and in making this we should be guided exclusively by the acknowledged physiology and pathology of the day, so as to bring the two into some kind of harmony.

The author of the paper had very properly suggested one desirable purpose to guide us, namely, that in the daily use of vegetable remedies we should have a suspicion of any which did not contain an active principle that could be isolated. At the same time, there were some remedies which Dr. Thomson would prefer to have remain as they are; for example, ergot, rhubarb, and some others which were most effective when administered in substance.

With reference to the effects produced by remedies, it was very unsatisfactory to go to clinical experience because it was such an uncertain course and entirely dependent upon the observer. Clinical experience when cited in favor of any therapeutical measure as well as therapeutical agent contained so many sources of error that he feared we should be far from being able to reform our Pharmacopœia upon such evidence.

Lastly, he would suggest, as an element of reform in our Pharmacopœia, the selection of some extensive principle which would in its application govern and determine the classification of remedies. For example, he would divide all remedies into those which produce cumulative effects and those which never act in this manner. If we could succeed in doing that we could quickly simplify our Pharmacopœia. Medicines which act cumulatively are those which must be given in repeated doses, as, for example, mercury given until the system is affected; on the other hand, there are remedies which produce their effects in a single dose, and never otherwise.

In conclusion, Dr. Thomson thought that we should set about the work of selection of remedies and of adopting a plan by means of which three-fourths of the Pharmacopœia of the United States might be eliminated.

DR. F. A. CASTLE said there were two points in the discussion of the subject to which attention should be directed: First, the remedies to be used in the treatment of any particular case, and second, the remedies which should enter into the Pharmacopœia. It was the habit of an old Scotch physician to select a few remedies belonging to the different classes, and rarely did he use anything else, unless it was something quite new and the value of which was thoroughly established; at the same time, he never left a stone unturned to find out something new with regard to the old remedies. This principle kept in view at the bedside might be of great service in prescribing in the cases which we were called upon to treat.

But, on the other hand, when we undertake to make a pharmacopœia which shall contain a description of the remedies which are recognized by the profession of a country, such as the United States, or Great Britain, or Germany, it was like undertaking to sweep back the Atlantic Ocean with a broom to say what should be left out and what should be retained. The Pharmacopœia does not attempt to tell what shall be used or what shall not be used, but simply attempts to describe remedies which have been used sufficiently to warrant their introduction. There was no doubt that in the formation of every pharmacopœia many remedies were introduced largely as a matter of prejudice, and not as a result of intelligence; but to undertake to wipe out three-fourths of the Pharmacopœia of the United States was a thing which could not be done. Dr. Castle would impress this fact, that while each one may make his pharmacopœia to satisfy himself with regard to the activity of remedies, he needs to be more liberal with regard to the remedies which he intends to offer to the medical profession of his country.

With reference to the choice in a number of articles belonging to the same class, this might be looked at from another standpoint. There was no doubt but what there were many remedial agents in the vegetable kingdom which possessed similar powers, but suppose it were agreed to ignore all but one, which by general consent was regarded as the best, the result would be that the cost of the article chosen would be very considerably enchanced because of the increased demand. It seemed to be a very wise provision of nature that the same principle was found in a number of remedies belonging to the vegetable kingdom.

IS TYPHOID FEVER EVER OF SPONTANEOUS ORIGIN?

DR. J. H. EMERSON opened the discussion and said: It is my conception of the office of one appointed to open a discussion that he should present an introduction to the subject proposed; that the presentation of his own views is permissible, but should not be a prominent feature; that his endeavor should be to map out the

field, and that he should reckon it a success if the discussion ultimately follows the lines he lays down.

The subject of the evening is the following: "Is typhoid fever ever of spontaneous origin?" It is not a new topic, but has engaged the attention of the profession in many lands, and at the meetings of many learned societies for thirty-five or forty years, and has been the incentive to much painstaking and thorough research in following up the history of isolated outbreaks, and to ingenious and learned arguments. Leading authors have coined names for the disease, such as pythogenic and enteric fever, and ileo-typhus, which were expressive of their views of its etiology, and much time has been spent in rather unprofitable discussions turning on the significance attached to a word, such as *contagion*. One point after another has been gradually established, and the assent of both parties to the controversy won, and the investigations on micro-organisms published, within the last five years especially, have done much to simplify the question at issue; for if it can be proved that there is a bacillus which bears to typhoid fever the relation which the spirillum, for example, bears to relapsing fever, the position of the disease as to its etiology is fixed. If this proof is wanting, and it must be said that the profession at large is not yet satisfied of the existence of such a microbe holding such relations to typhoid fever, then the argument must follow other channels. Now Gaffky, as quoted by Green, says that observers believe that a certain bacillus is the cause of typhoid, that it is constantly present in typhoid, is recognizable from all known bacilli, and is not found in any other disease. The identity or non-identity of typhus and typhoid fevers was still a mooted question when I began to study medicine, a point I refer to simply to illustrate how gradually the problems presented by this disease are being solved. It is now no matter of dispute that typhoid fever is conveyed or communicated through the agency of the dejecta, notably when these have undergone certain changes to which they are liable on exposure, especially in drains or vaults, it may be a long time after emission. But is that the only way in which it is transmitted? The study bestowed upon various localized outbreaks of this disease has brought to light a series of most interesting and instructive facts as to the media of its dissemination, and the agencies by which a single case may infect a whole community. Most unexpected sources of contamination of water have been laboriously traced out, involving indirectly the milk-supply, and it is very evident that study must be directed in these and other new directions; *e.g.*, to the persistency of life in typhoid germs, also to the diseases of animals, in view, especially of the outbreak at Kloten, although good authorities still express doubts whether any animal suffers from the typhoid fever of man. So it seems that as knowledge has increased, and as methods and instruments of research have improved in efficiency many questions formerly in dispute have been cleared up; "obscurity" in causes has given place to clearness, and ways of communication previously unsuspected have been made known. Thus a point has been reached where the question now is, whether one's powers of belief would be most taxed in supposing that the seeds of the disease, originating in ways which all recognize, have been conveyed to the new victim through agencies which have hitherto eluded detection, but which subsequent investigations may yet disclose, or in imagining that the germs of the disease, which even those who maintain the theory of its spontaneous origin now concede to be a material substance, a *contagium vivum*, can originate from sources independent of previous cases of typhoid, and in substances never yet proved to have a causative relation to it.

I suppose it would be correct to make three groups, in one or other of which upholders of all the chief opinions on this question would find a place: 1. Those who believe with Murchison in the spontaneous origin of typhoid fever. 2. Those who believe with Liebermeister, as quoted by Homolle, that it never originates spontaneously, and that the condition necessary for its development is the presence of a germ derived from a typhoid patient. 3. Those who incline to the latter view, but who prefer to hold their judgment suspended in the absence of positive demonstrative proof, which has not yet been furnished.

Dr. S. Oakley Vander Poel referred to the general proposition of the transmissibility of typhoid fever by ingestion and respiration, and quoted some of the views formerly entertained concerning the disease. For example, Murchison claimed that typhoid fever might originate whenever the human excreta were allowed to undergo a certain amount of fermentation. To that view Dr. Vander Poel could not now fully subscribe, although for many years he entertained the view that the disease could originate *de novo*. The argument in favor of a specific cause of typhoid fever was of two kinds, the negative and the positive. First, with reference to the negative argument, if it could be shown that in many instances polluted water and food had been used without developing typhoid fever it was an argument in favor of a specific cause for typhoid fever. If, on the other hand, it could be proven that the direct introduction of excreta from typhoid-fever patients into the food and water partaken of was followed by the development of typhoid fever in persons or in communities, it furnished a positive argument in favor of a specific cause of typhoid fever.

It was a fact established beyond question, that in this country many cities were supplied with polluted water, and yet typhoid fever was no more prevalent in those cities than in others in which the water-supply was of the purest kind. For example, the city of Albany received its water-supply largely from the Hudson River, into which the sewage of Troy, situated five or six miles above, was emptied, and yet Albany had not suffered from typhoid fever more than other cities. In the southern portion of Albany there still remained several wells from which the inhabitants took water for drinking and cooking purposes. It was found on analysis that this water was intensely polluted, and the Board of Health ordered that the wells be closed. But the citizens objected and continued to use the water, and not a case of typhoid fever occurred in that part of the city. Such evidence was negative in character.

On the other hand, the late epidemic which occurred in Plymouth, Pa., furnished a very powerful positive argument in favor of a specific cause of typhoid fever in the fact that while the city was supplied with the polluted water from the Susquehanna, typhoid fever did not occur, but as soon as the water in the reservoir became polluted by the mountain stream, which received the dejecta of typhoid-fever patients, typhoid fever broke out within the ordinary incubative period.

Similar instances had occurred in England. Dr. Vander Poel believed that large towns were not the proper places in which to make investigations of this kind, and that the best evidence could be derived from the study of cases occurring in small communities, where each one could be traced to its cause.

Dr. W. H. Thomson said that he would as soon expect typhoid fever to be developed spontaneously as potatoes.

The Chairman was not in the position which Dr. Thomson was, because he did not think the question was by any means yet settled. In discussing this subject the first question which came to him was, Did typhoid fever possess any diagnostic facts, clinically or pathologically? The history of typhoid fever, especially as written by the Germans, would lead one to believe that there were three diagnostic symptoms; a peculiar range of temperature during the first week, a rose-colored eruption, and a characteristic diarrhœa; and that after death there is a characteristic ulceration of the intestines.

So far, however, as the typhoid fever of New York was

concerned, if it occurred, these symptoms were not necessarily present, neither the characteristic range of temperature, the characteristic spots, nor the characteristic diarrhœa, in a large proportion of cases. Yet what was called typhoid fever occurred abundantly.

Again, intestines were seen in which there were ulcerations, and yet during life there were no symptoms indicating the presence of typhoid fever, but at the same time these ulcerations could not be distinguished from the ulcerations belonging to typhoid fever. There was a septic fever produced by drinking polluted water, in which the intestinal lesions could not, by the naked eye, be distinguished from those said to be characteristic of typhoid fever. Therefore, he would say that there was nothing necessarily specific about typhoid fever. But the next question which arose was, Is it a contagious disease? If there was any specific poison which produced typhoid fever, it was a contagious disease. But clinical experience did not illustrate that typhoid fever sustained this theory; for, in the hospitals to-day typhoid-fever patients were found side by side with other patients, and it was not expected that by so placing them the poison would be conveyed from them to other patients. It was not contagious and it was not necessarily specific in its cause.

It had been established that certain conditions were necessary to the development of the poison of intermittent fever, and the question might arise, could not typhoid fever be developed in the same manner? but typhoid fever did not so behave.

Dr. Loomis would not commit himself to the spontaneous origin of typhoid fever, and yet he was not willing to commit himself to the existence of a specific germ as the cause of typhoid fever. There was undoubtedly a specific poison in all fevers; that is, a poison which produces malarial fevers, but which differed from the poison that produces a contagious fever. A contagious poison was never of spontaneous origin; there must be a case to get a case from, and typhoid fever was not contagious.

The more he saw of typhoid fever as it occurred in New York, the more he inclined to the name of continued fever, given by the elder Professor Wood, as the name best applied to all those fevers which were partly malarial and partly typhoid, or as they had been called typho-malarial; all apparently of one type but varying very greatly in their manifestations in different cases.

Dr. R. A. Caldwell asked, what was understood by a fever developing spontaneously?

The Chairman replied, a fever which developed without known specific cause.

Dr. Vander Poel desired to take some exceptions to the Chairman's remarks, who stated that because typhoid fever was not contagious, it was not necessarily due to a specific poison. He made a distinction between transmissible disease and contagious disease. Yellow fever was not contagious, and yet it was a specific disease and easily transmitted. Cholera also was not a contagious disease, but it was easily transmissible like yellow fever, and in either case it was only after the fermentative process had begun that the poisonous element was developed and became contagious. In typhoid fever the dejections are contagious, not in the sense of conveying the disease from one person to another, but through the medium of the dejecta, which have undergone certain fermentative changes, the disease becomes more or less contagious in its character. Yellow fever, cholera, typhoid fever, neither of which were strictly contagious, were transmissible from person to person.

The Chairman said that perhaps he did not make himself exactly clear in his former statement. He recognized contagious and infectious diseases. The contagious diseases were infectious, but the infectious diseases were not necessarily contagious. Typhoid fever was an infectious disease, but the poison of typhoid fever could not be carried directly from the human being in which it was produced to another human being and cause the disease; it must first go through certain changes before it became infectious.

Dr. W. H. Thomson said that it was sometimes profitable to discuss the meaning of medical terms. He had been accustomed, in his lectures on disinfection, to use two terms with three subdivisions; first, he spoke of communicable diseases; meaning thereby those which pass from a human or animal body to another human or animal body. He preferred the word communicable, because it did not define the mode in which the disease passed from one body to another; restricting the term to the fact that every case must have originated from an antecedent case of the disease and not from any other source.

The second class were the malarial diseases, an unfortunate word, because it implied transmission through air; but these diseases, instead of having their origin in the human or animal body, came from a thing or place.

To which class does typhoid fever belong? To the communicable from an antecedent case, or to those which come from a place or thing?

He believed that when the subject was studied in this way, we should admit that typhoid fever was a communicable and not a contagious disease. He was very far from believing that it had yet been demonstrated that typhoid fever was due to a micro-organism, and yet the laws of typhoid fever, as it appeared in this country, showed that it belonged in general character and results to the communicable diseases.

Dr. A. A. Smith said it seemed to him that the solution of the question lay in the answer to the other question, Has a typhoid bacillus been discovered? If it had, then the question almost answered itself. If he interpreted correctly the remarks which had been made that would be the position taken by all who had spoken, and until it was decided whether or not there was a specific bacillus which belonged to typhoid fever and to no other disease, the question of spontaneous origin could not be answered. The very latest reports from German sources were from Gaffky, who took the position that he had discovered the typhoid bacillus. He had made observations in sixty-five cases of typhoid fever, in which in nearly eighty-five per cent. he was able to demonstrate the presence of the bacillus in the liver, spleen, blood, and mesenteric glands. It seemed to Dr. Smith that we must still remain on the fence, as the Chairman had expressed himself as being willing to do, until this fact was proved. If it had been proved that a specific bacillus existed in other diseases, it seemed to him that we should not commit ourselves to a positive opinion until it was demonstrated whether or not typhoid fever had a specific bacillus, and he was unable to see how the question of spontaneity of origin could be decided until that question was settled. He confessed that he had seen cases where he had been at a very great loss to determine where the poison which produced unmistakable typhoid fever came from. He belonged to the third class referred to by Dr. Emerson. He would like to be convinced that there was a typhoid bacillus, and should hold his opinion open until microscopists had learned more with reference to micro-organisms.

Dr. A. Jacobi said that was exactly the point where he rested his doubt, as microscopists might discover very many bacilli, but that would not prove that the bacillus was the cause of the disease. It had already been learned from microscopists that there were bacilli in a number of different diseases, and it was quite natural to reason from that that we were in a position to assume that the etiology of all diseases in which bacilli could be found could be explained. Obermeyer found a bacillus in relapsing fever at a certain period in the disease, but it had not been proven that it was the cause of the disease. It had not been found in the beginning of the disease, but even if it had been found at that period it would be doubtful whether it was the cause, or whether the disease was due to causes which were aroused by the bacillus, or whether

the bacillus was the result of the disease. He did not believe that we were justified in saying that the bacillus of relapsing fever was the cause of the disease.

With regard to other diseases, microscopists had been anxious to find bacilli, and thus Gaffky had his bacillus, and Klebs had his bacillus, and so on. So with reference to diphtheria, Klebs had his bacillus, which he assured us was the cause of diphtheria; Eberth discovered his bacillus, which he also said was the cause of diphtheria; and even so cool-headed and sound a man as Gerhardt was led to make the statement, only a few years ago, that undoubtedly diphtheria was a bacillus disease; but as Klebs had discovered one bacillus, and Eberth had found his bacillus, he declared that it was probable that *two different* bacilli could be the cause of diphtheria.

With regard to the question raised by the Chairman as to the existence of typhoid fever, we have heretofore been accustomed to hear him express his opinion quite positively; but to-night the Chairman seemed to be inclined to feel that he was rather on the fence, and several of the gentlemen had said the same thing, and Dr. Jacobi was also willing to place himself among them. But while upon the fence they would probably have their eyes open, and not lose sight of criticism. Those who were guided by the skill of experts who lived under the shadows of Boards of Health, even of such as that over which Koch himself presided, were very apt to be prejudiced in favor of certain theories. Gaffky was committed to the finding of a bacillus, and it was kind of him to find one in only eighty-five per cent. of his cases; if he had been in Gaffky's place he would have found the bacillus in one hundred per cent. Dr. Jacobi had always been glad that bacilli were found, as he was always glad to receive pathological facts recently discovered.

With regard to the position of the Chairman, he would say that it was not necessary to reject typhoid fever as a morbid entity. If it was found that it presented a variety of phases, that was no more than had been seen in other diseases. Even as pronounced a disease as scarlet fever manifested itself in various ways, and so also did measles, sometimes so varied that these diseases were frequently difficult to recognize. Furthermore, in certain years, measles and scarlet fever did not exhibit any pronounced mortality, while in other years the percentage of mortality was immense; still, both set of cases were certainly measles and scarlet fever. Thus it was with typhoid fever. Dr. Jacobi was aware that we had never seen a single epidemic in this country in which typhoid fever had prevailed as the Germans had described it, and even the Germans were beginning to modify their opinions, yet it was only within the last few years that they admitted that typhoid fever might occur without diarrhœa, but that in those cases the characteristic changes in the intestines existed. He would say that here we have a large majority of cases of typhoid fever in which there was no diarrhœa, and that even perforation of the intestines might occur without diarrhœa. The one anatomical fact which he would regard as characteristic of typhoid fever was the ulceration of Peyer's patches. The Chairman appeared to believe that the same ulcerations were found in septic enteritis, but what Dr. Jacobi had seen presented a little different appearance. The ulcerations in septic enteritis were not only about Peyer's patches, but were all through the intestines, beginning in the *upper portion* of the small intestines and extending throughout their entire length. That was what we never saw in severe cases of typhoid fever, in which the ulcerations were confined in the *lower portion* of the ileum, might extend throughout the colon, but were not seen in the upper part of the small intestine.

Again, this peculiar anatomical fact was not seen in young persons, and why not? Although typhoid fever frequently occurs in young persons, the characteristic ulcerations are not found because the Peyer's patches are but little developed.

Typhoid fever is introduced by the respiratory or the digestive organs, mostly by the latter. Small children do not take water in the shape in which adults consume it, but take it either in the shape of milk or in such substances as necessitate boiling the water. It is in this manner that the organic poisons are destroyed, and thus it is that in the first place there are less changes in the intestinal tract and the symptoms are less developed in small children than in mild cases occurring in adults. This shows that typhoid fever may occur in a variety of forms, according to the accompanying circumstances.

Dr. Jacobi believed that there was such a thing as typho-malarial fever, and did not believe that it was the same disease as typhoid fever. It was a severe fever, typhoid in character, lasted longer than typhoid fever, and at the end of three weeks the fever remained, frequently relapsed; after awhile the fever became irregular; in the fifth or sixth week attacks occurred which looked very much like intermittent fever, one or even two chills occurring daily; then fever more of a remittent type manifested itself, and finally complete disappearance of the fever.

The Section then adjourned.

Correspondence.

THE MEDICAL TREATMENT OF UTERINE FIBROIDS.

To the Editor of The Medical Record.

Sir: Your abstract of the paper read by Dr. More Madden at the British Gynecological Society requires a little explanation as to the original paper to make its value really understood on your side of the water. The explanation is briefly this: that Dr. Keith, Mr. Thornton, and myself, who really may be taken to be the chief performers of hysterectomy in this country, stand, of course, on a different platform from Dr. More Madden. We do not deny, any more than he does, that a vast number, probably the greater number, of cases of uterine myoma require no kind of treatment at all, either medical or surgical; in fact, they probably are not discovered at all in very many instances. But we see a selected class of cases which Dr. More Madden is not called upon to deal with, and apparently, with the exception of three instances, he has not seen them at all. This arises, of course, from our different positions. Dr. More Madden is physician to the Mater Misericordia Hospital in Dublin, which is an institution of a purely sectarian character, in which there is no very active amount of work going on. Dr. More Madden himself has a distinguished position as a practitioner in Dublin, but a proof that he has no very special position is afforded in the fact that, after the most careful inquiry in Dublin, I can only discover that he has performed abdominal section once; that it was, very much to his credit, successful, but that he has not had an opportunity of repeating his success. Those of us already named, on the contrary, are engaged every week of our lives in operating upon the most serious class of cases—cases which are sent to us from, practically, all parts of the world. We therefore get numerous cases of a kind which, as I have said, are almost unknown, save in Dr. More Madden's experience.

Concerning the operation for the removal of the appendages for the treatment of uterine myoma, I immediately followed Dr. More Madden's paper by one which I read at the Cardiff meeting of the British Medical Association, and this, when you have seen it, I think, will be found to establish, beyond all doubt, the immense value of this particular proceeding.

I will conclude my letter by one small explanation, which is of a purely personal character. Quoting Dr. More Madden, you agree with him in what he says about my own practice, specially speaking of incompleted

operations. Thus you say, "Of these incompleted operations, Mr. Lawson Tait thinks that he may speak with a certain amount of satisfaction, though from what he derives this contentment we are, with Dr. Madden, at a loss to understand, as his mortality in them was fifty per cent." You, of course, are not responsible for this dishonest misquotation: you merely take the matter as Dr. More Madden puts it. If Dr. Madden had completed the sentence, of which he only takes a few words, he would have displayed to you and his others readers this: "Of one group I think I may speak with a certain amount of satisfaction; that is, the group which includes thirty cases of incomplete operations, even if all that I can say is that three per cent. of incomplete operations is not a large proportion, and I have the satisfaction of knowing that it is still on the decrease, as my experience grows." When this sentence of mine is completed, an altogether different aspect appears from that most improper appearance put upon it by Dr. More Madden, who tries to make it appear, as if I had some inward satisfaction in a mortality of fifty per cent., though, by the way, the mortality is not fifty per cent.

I am, Sir, yours, etc.,

LAWSON TAIT.

BIRMINGHAM, October, 1885.

New Instruments.

BINAURAL CONVERSATION-TUBE FOR THE AURAL INSTRUCTION OF THE DEAF.

DR. SEXTON stated at the recent meeting of the American Otological Society that in many instances the deaf seemed to get the best idea of the character of sound constituting the human voice when spoken to through a mouth trumpet as recommended by him many years ago; but there were a large number of deaf children who could obtain a pretty good idea of the natural sound of the voice by means of a binaural tube, whereby they may compare their own voice with the teacher's. The advantages of the binaural transmission of sound are manifest where some hearing power remains in both ears. The instrument is serviceable in teaching almost all very

deaf children or in conversing with deaf people. The sound of the voice is not so much increased by this instrument as not to be heard in a natural tone, as when spoken directly into the ear by close contact of the speaker. The painfulness of trumpets and conical tubes is thus avoided. The application and use of the instrument are well shown in the accompanying illustration. They are manufactured by Mr. W. F. Ford, of New York. [Since the instrument was shown to the Society Dr. Sexton has caused a self-retaining appliance to be attached, so that a spring holds the ear-pieces in place.]

Army and Navy News.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from October 18, 1885, to October 24, 1885.

MCPARLIN, T. A., Colonel and Surgeon. Directed to await further orders in New York City. Letter from A. G. O., October 19, 1885.

VOLLUM, E. P., Lieutenant-Colonel and Surgeon. Assigned to duty as Attending Surgeon, Headquarters Department of the Platte, Omaha, Neb., relieving Assistant Surgeon Wm. C. Shannon. S. O. 103, Department of the Platte, October 15, 1885.

HEGER, ANTHONY, Major and Surgeon. Directed, in addition to his present duties as Member of Army Medical Examining Board now in session in New York City, to perform the duties of Attending Surgeon in that city. S. O. 240, A. G. O., October 19, 1885.

BAILY, JOSEPH C., Major and Surgeon. Granted leave of absence for twenty days. S. O. 225, Department of the East, October 19, 1885.

Medical Items.

CONCERNING CLIQUES.—We recently encountered an old practitioner whose memory extended over a sufficient period of observation of the medical world of New York to give his words an authority worthy of recognition. He thus discoursed concerning cliques: "New York, in the early days, was under the all-powerful sway of the New York Hospital Clique, centring about the old Barclay Street Medical College. This clique was law and gospel to the profession. It held a mighty power. The ins had everything, the outs nothing. But, as is often the case, some of the profession grew restive under the somewhat arbitrary control then exercised, and questions as to rights and patronage arose. The result was the overthrow of the New York Hospital Clique, and the establishment of the clique which represented the College of Physicians and Surgeons. The Kappa Lambda Society was formed about this time. Its object was to restrict patronage in consultations and professional associations to its members. Most of the members belonged to the 'old college,' and for a time controlled the business of the then young city. It was easy for them to say that all others were wanting in respectability and standing, and there was no appeal. This sway in time gave way to the clique at the University, under the control of Dr. Valentine Mott, who stood at the head of the profession, and was the leading surgeon, not only of New York, but of the country. No one man has been able to occupy his place since. Time went on, and three powerful cliques represented the former power which was swayed by one. They were named respectively after the three colleges around which they centred, that of the Physicians and Surgeons, the University, and Bellevue. The reign of cliques is over—New York has become too large for them. Their empire, like that of the old Roman, has gone to pieces by its own weight. To-day there are feeble attempts at cliquism. Ambition is ever ready to grasp at the control and supremacy represented by them, but it cannot be said that the medical profession to-day is under the dominance of one man or set of men holding in their hands the power of life and death. *Le roi est mort;* but now no one shouts *vive le roi.* A republic has succeeded, based on the suffrage of the people. No one man in New York is accorded the title of *The Surgeon*, or the physician; the question is no longer asked in the singular; if it is, it is always answered in the plural. The leading medical societies give every member a chance to give his experience, the leading medical journals print his articles if they are worthy of it, and the field is quite

open to new-comers. It is not in the spirit of the age to tolerate cliques in professional circles, whatever may be the case in social, and it must be considered as a sign of a greater breadth of culture—a broadening of the phylacteries of knowledge. It is true, the colleges are still family stock concerns, but the next generation may change even this. Fairness and truth generally triumph in the long run. But I may tell you more about the colleges at another time."

STATIC ELECTRICITY.—Dr. A. L. Ranney writes: "In your issue of October 24th, two paragraphs appeared relative to my improvement of the Medical Holtz Static Machine, which demand a reply. I will answer each separately: 1. The *soft rubber packing* in the joints of my case is not claimed by Mr. Rosseau either in his letter or the advertisement which he simultaneously publishes; nor, to my knowledge, has it ever been before used in a static machine. This constitutes *my only claim to priority*. The other modifications enumerated by me are of minor importance; but they add to the general effectiveness of the instrument. An air-tight case cannot be made without some protection to the joints, against the entrance of dampness from without. 2. The criticism of the correspondent who quibbles over the chemical effects of burning alcohol in the case of a static machine, is answered *practically* by the fact that a machine will often be excited to action during damp weather by the heated air thus produced, when it will not work under other circumstances until the air is dried by fresh calcium. This is not always at hand. There is a distinction to be drawn between a temporary lift out of a difficulty and a recommendation of such a step as the best way of overcoming it. This criticism is evidently not made by a practical man. As far as I can ascertain, it is a difficult matter for Mr. Rosseau or any other manufacturer to establish *priority for any new principle* in his machine built on the Holtz model or the Toepler model. I think any fair-minded reader will acquit me of a desire to do any one injustice or to claim priority for any part of my model outside of the *soft rubber packing used to make its joints impervious to air*. Even this may have been done before, but, if so, I am not aware of it. I will gladly waive all claim even to this improvement when convinced that I am in error."

PHYSICIANS' COMMISSIONS FROM DRUGGISTS.—Dr. Richard B. Faulkner, of Allegheny, Pa., sends a letter commenting upon the subject of physicians' commissions from druggists. At the recent meeting of the American Pharmaceutical Association, at Pittsburg, Mr. J. W. Colcord, of Lynn, Mass., read an extract from a San Francisco letter, which asserted that pharmacists are compelled to pay sixty per cent. of the *gross* receipts as commission to the physicians who patronize them. Dr. Faulkner was assured by Professor John M. Maisch that Mr. Colcord's statement was openly made and corroborated by Professor Painter, who added that such cases were common, "not isolated; and that the leading druggists of San Francisco pay to the leading physicians, in money, sixty per cent. of gross receipts." Mr. Whelpley, of the *National Druggist*, said, "Percentages are given in St. Louis, and in different ways; for example, druggists would fit up physicians' offices." Our correspondent avers that this practice of giving percentages does not exist in Allegheny.

GERHARDT'S TREATMENT FOR LUPUS.—Gerhardt has lately employed a treatment for lupus that appears to be very valuable. He applies ice-bags to them during the greater part of the day. He recently showed four cases that very entirely healed over by a very fine elastic scar. He got the idea by arguing that, since lupus is produced by the tuberculosis bacilli, and since the activity of these is greatly diminished by cold, by the employment of this his patients might be more benefited than by any other measure. Of course the spores of the bacillus are not so easily affected; but such objections are always to be found in every kind of treatment. That cold, continuously applied, penetrates inwardly, he has demonstrated by taking the temperature in both sides of the mouth after the ice-bag had been applied to one of the cheeks for some hours. He found the difference to be as much as 3° C. in some cases. The attained results certainly speak well for the method.—*Medical Press of Western New York.*

IN SEVERE CASES OF LUMBAGO, Professor Da Costa advised acetate of potassium, ʒj., four times daily, to be dissolved in syrup. He gives also morphine and atropine.—*C. and C. Record.*

THE ANCIENT VIEW OF THE VALUE OF DIGITALIS.—In "The English Physician," 1656, by Nich. Culpeper, a chapter is given on the uses of digitalis (*Lancet*). After giving a botanical description and the habitat of digitalis, Dr. Culpeper goes on to say: "The Plant is under the Dominion of Venus, being of a gentle clensing nature; and withal very friendly to Nature. The Herb is familiarly and frequently used by the Italians to heal any fresh or green Wound, the Leavs being but bruised and bound thereon; and the Juyce thereof is also used in old Sores, to clens, dry, and heal them. The Decoction hereof made up with some Suger or Honey is available to clens and purge the Body, both upward and downward, sometimes of tough flegm and clammy humors, and to open obstructions of the Liver and Spleen. It hath been found by experience to be available for the King's Evil. The Herb bruised and applied, or an Oyntment made with the Juyce thereof and so used, and a Decoction of two handfuls thereof with four ounces of Polipody in ale, hath been found by late experience to cure divers of the Falling-sickness that have been troubled with it above twenty years. Myself am confident that an Oyntment of it is one of the best Remidies for a scabby head that is."

LAST year the number of medical and pharmaceutical students who completed their curriculum at the universities of Spain was 703, the total number of students graduating being 3,598.

IT is reported in the Bombay Season Reports that on December 27th last seven shepherds lost their lives at Athni, in the Belgaum District, through being struck by hailstones of the size of a cocoanut.

THE ODOR OF NEW PAINT AND ABORTION.—Dr. Charles H. French, of Waterbury, writes that he has, on two occasions, recently been consulted by patients who were in the seventh month of pregnancy, and who desired to move into a newly painted house. They desired to know whether there would be any danger of abortion being caused by the odor of the new paint, as popular opinion asserts. Dr. French has been unable to find any medical authority for this belief, and is desirous of learning what is the experience of others in the matter.

ONE CAN QUOTE AS WELL AS ANOTHER.—"Measure for Measure," as the patient said when he poured out ʒ ij. of turpentine for his tape-worm. "All's well if this end is well," said the tape-worm, as he buried his front end in a follicle of Lieberkühn while the turpentine swept by.

THE NEW IDEA IN NOSTRUMS is not to pretend that a particular medicine will cure all maladies, but will positively and completely cure the one disease for which it is designed. The clear-sighted student of human nature who discovered this slant is said to be on the road to a fortune.

CONTROVERSIAL.—

Said Koch: "I've some comma bacilli."
Said Klein: "I don't think they will kill." "I"
Said Finkler (and Prior),
"Believe he's a liar."
Said Ferrán: "I can knock you *all* sill i."

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Original Articles.

SUMMARY OF ONE HUNDRED AND SEVENTY-EIGHT CASES OF TYPHOID FEVER.

BY EDWIN T. DOUBLEDAY, M.D.,

MEDICAL CLINICAL REGISTRAR TO THE NEW YORK HOSPITAL.

THIS summary comprises the cases of typhoid fever treated in the New York Hospital (new building) from April, 1877, to January, 1885. The following symptoms were taken as marks of the commencement of the disease: chilly sensations, diarrhœa, frontal headache, epistaxis, or pain in the bowels. In cases where all these were absent, or not stated with sufficient accuracy, the time at which the patient took to his bed is taken as a date on which to base calculations.

Number of cases, 178; males, 125; females, 53.

R. = recovered; D = died.

AGE.	R.	D.	Total.
5 to 10 years	2	....	2
10 to 15 years	3	....	3
15 to 20 years	24	5	29
20 to 25 years	57	10	67
25 to 30 years	41	9	50
30 to 35 years	8	3	11
35 to 40 years	3	1	4
40 to 45 years	9	1	10
45 to 55 years	1	1	2

OCCURRENCE.

	1877.		1878.		1879.		1880.		1881.		1882.		1883.		1884.		Total.	
	R.	D.	R.	D.	R.	D.	R.	D.	R.	D.	R.	D.	R.	D.	R.	D.	R.	D.
January	..	..	..	..	3	..	..	..	..	..	1	1	1	..	2	..	7	1
February	..	..	..	..	..	1	..	..	..	..	..	..	1	..	1	1	3	1
March	..	..	..	1	..	1	2	..	..	..	..	..	..	..	3	..	7	0
April	1	..	..	..	..	1	..	..	..	..	1	..	1	..	..	..	3	1
May	..	..	..	..	..	..	2	..	3	..	2	..	..	..	..	..	7	0
June	..	..	..	1	..	3	1	1	..	..	..	..	..	..	4	1	9	2
July	1	1	..	1	..	1	3	..	..	..	..	..	4	..	4	2	14	3
August	..	1	1	..	1	1	3	2	7	2	5	..	3	6	20	12		
September	5	..	1	..	1	..	2	1	3	..	4	..	7	1	5	1	28	3
October	..	3	..	3	..	..	1	6	1	2	..	7	2	4	..	25	4	
November	1	..	..	..	..	2	..	2	..	2	..	5	..	4	2	16	2	
December	..	..	..	1	..	..	..	..	..	2	1	2	..	4	..	9	1	

DURATION OF FEVER.

	Males. R.	Males. D.	Females. R.	Females. D.
In all cases	29.1 days.	28+ days.	28.6 days.	24½ days.
In uncomplicated cases	24½ "	23½ "	25½ "	25⅝ "
In complicated cases	33⅓ "	32⅛ "	31 1/10 "	23½ "

NATURE OF CASES.

	Males. R.	Males. D.	Females. R.	Females. D.
Uncomplicated	73	9	23	6
Complicated	34	9	18	6

Relapse occurred in 33 cases; males, 19, = 15.2 per cent.; females, 14 = 26.4 per cent. In five cases there was more than one relapse. Average duration of the relapse: males, 12.88 days; females, 12.95 days. In 9 of the 33 cases of relapse the cause is stated to have been sitting up too early in convalescence. Constipation is supposed to have caused a relapse in 4 cases, and in 1 case the relapse followed an attack of gastric dyspepsia. In 19 cases of relapse no assignable cause could be discovered. None of the cases complicated by a relapse were fatal.

Frequency of Symptoms.—Diarrhœa occurred in one hundred and fifteen cases. Average time of occurrence was the 5.5th day of the disease.

Eruption was observed in ninety-six cases. Average time of appearance was the twelfth day of the disease. The eruption appeared in sixteen cases on the seventh day; in fifteen cases on the fourteenth day; in seven cases on the eighth day, and in six cases each on the fifth, tenth, and twelfth days. Epistaxis occurred in fifty-seven cases. In fifteen cases it occurred more than once. In over a third of the fifty-seven cases epistaxis occurred on the second day of the disease.

Delirium occurred in forty-six cases. Of these forty-six cases twenty-six recovered and twenty died. Of those who recovered the average time at which delirium first appeared was the 13.5th day of the disease. Of those who died the average time of its appearance was the 15.5th day of the disease.

Complications. — Bronchitis occurred so often, and almost invariably at the end of the first or beginning of the second week, that one is tempted to regard it more as a symptom than a complication. It occurred in nineteen cases.

Six cases were complicated by phlebitis. The times of appearance and the situation were as follows: Right femoral vein, on the thirtieth and on the fifty-fifth day; left femoral vein, on the eighteenth and on the thirty-third day; left popliteal vein, on the thirty-third day; right brachial vein, on the sixty-second day.

Abscess complicated seven cases. The abscesses were situated as follows: Perineal, ischio-rectal, left hypochondriac, right arm, both inguinal, left submaxillary, and right parotid region, followed by multiple abscesses. In five of these cases the abscesses were sequelæ rather than complications. One patient (case seven) had thirteen abscesses. He had a chill at the end of the fourth week of the disease, and the temperature ran up from 99° to 103.5°. Examination showed some induration and swelling of the right parotid gland; this was opened on the following day. Subsequently twelve abscesses were opened. These were on the back, gluteal region, inguinal region, malar region, parotid (left), and both submaxillary regions. After the first chill there were only two rises of temperature, and only five of the abscesses gave noticeable pain. These five were situated where pressure was made on them. Some of the abscesses were only detected by daily careful examination of the whole body. Various dressings were tried on the abscesses, among them balsam Peru, zinc oxide (dry and in ointment), salicylic acid, bichloride gauze, boracic acid solution, carbolic dressing, and iodoform. The abscesses treated in the following manner healed quickest: free incision, washed with carbolic acid solution (1 to 40), small amount of iodoform dusted in the cavity, outside an iodoform compress and pressure, and approximation of the edges secured by means of strapping. Abscesses treated in this way healed almost entirely by first intention, notwithstanding the patient was very weak and had extensive bed-sores.

Otitis media suppurativa occurred in three cases.

General furunculosis followed the fever in eight cases, in seven of these cases it came on in the fifth week.

Hemorrhage (intestinal) occurred in twelve cases at the following time: Third, seventh, tenth, twelfth, fourteenth, eighteenth, nineteenth, twentieth, forty-seventh, and forty-ninth days, all cured; on the thirteenth, twenty-seventh, fourteenth, twenty-ninth, thirtieth, and thirty-ninth days, all died.

Three cases were complicated by cystitis. In these the patient had not been catheterized. In one case there was profuse hemorrhage from the uterus and from the vaginal mucous membrane.

Retention of urine was observed in twenty-two cases. In one case it came on in the first week, in eleven cases in the second week, and in ten cases in the third week.

In thirteen cases there was albumen, hyalin, and granular casts in the urine. Of these thirteen cases seven recovered and six died. In five cases the urine contained albumen with hyalin casts, of these four recovered and one died. In thirteen cases the urine contained albumen without casts. Of these eleven recovered and two died.

Lobar pneumonia complicated seven cases; five recovered and two died. Herpes occurred in the fourth week in two cases; both recovered. Bed-sores occurred in two cases only; both recovered. Periostitis (syphilitic?) occurred in two cases.

Mania, meningitis, tonsillitis, acute parenchymatous nephritis, acute rheumatism, persistent vomiting, persistent nausea, each complicated one case; all recovered. Catarrhal pneumonia, purulent bronchitis, abscess of the lung, and perforation of the intestine, each occurred in one case; all fatal. Tuberculosis complicated two cases; both fatal.

Infection.—In four cases there were other cases of typhoid fever in the house. In two cases the patients had been nursing persons sick with typhoid.

Temperature.—In four cases the temperature reached 107°; three recovered and one died. In eleven cases the thermometer registered 106°, or over. Of these three recovered and eight died. In forty-six cases the temperature reached 105°; thirty-five cases recovered and eleven died. These figures are exclusive of antemortem rises of temperature. In two cases death was preceded by a marked fall of temperature. The fall was 2° in one case and 5° in the other case. No hemorrhage in either case.

Treatment.—As few of the cases were similar in anything but their temperature curves, and the sets of cases belonging to different years varied much in their severity, it is a difficult matter to make any comparisons of the efficacy of the different plans of treatment employed. For feeding, milk, milk-punch, eggnog, peptonized milk, and beef-tea were used. Almost all the cases of 1883 and 1884 were fed on peptonized milk until the subsidence of the fever. For stimulants, brandy, whiskey, tr. digitalis, inf. digitalis, and occasionally ammonium carbonate were used. For reducing temperature, quinine, antipyrin, cinchona, kairin, alcohol sponge baths, cold baths, and the wet pack, singly and in combination, were used. Quinine and antipyrin were the drugs used most frequently alone. Quinine alone was used in forty-six cases; forty-three recovered and three died. Antipyrin alone was used in twelve cases; eleven recovered and one died. Kairin alone was only used in three cases; two recovered and one died.

Various remedies directed at the disease itself have been tried, such as bichloride of mercury, tr. iodine, carbolic acid, oil of eucalyptus, and calomel, but the cases are too few for any conclusions as to the best treatment to be reached.

A Large Ventral Hernia.—Dr. Samuel W. Francis, of Newport, R. I., reports a case of ventral hernia in which the measurements for a truss were as follows: circumference at the top, 41 inches; at the middle, 55 inches; at the bottom, 50 inches; length from above downward, 24 inches.

A SKETCH OF THE LIFE OF JAMES LAWRENCE LITTLE, M.D., AND OF THE TWENTY-FIVE YEARS IN WHICH HE PRACTISED SURGERY IN NEW YORK.[1]

By D. B. ST. JOHN ROOSA, M.D.,

NEW YORK.

James Lawrence Little was born of Scotch-Irish and English ancestry, in the city of Brooklyn, February 19, 1836. He attended private schools in his native city until he was about twenty years of age, when he attempted to become a bookseller, and for this purpose became a clerk in a Fulton Street establishment kept by Mr. Riker. The firm that engaged him had a stock of medical books as well as of general literature. The young clerk was soon so deeply engaged in the study of these books that he proved a very inefficient salesman, and he gave up his attempt in business.

This inclination to the study of medicine had already been seen in young Little when he was a mere boy. After much cogitation as to the ways and means of getting a skull for the purpose of study, he finally approached a venerable African grave-digger, who consented to furnish him with the desired relic, if he would bring twenty-five cents and a paper to wrap it in. Little secured the treasure on these terms, and returning home, took a peep at it, and, to his youthful horror, found that it was an unprepared skull looking upon him in the ghastly covering of facial integument and scalp. Fear got the better of his anatomical enthusiasm, and seeking a plan to get rid of what was now a source of dread at its horrible aspect, as well as of fear lest he might be found with such an unexplainable object upon him, he threw it into the waters of Wallabout Bay, and postponed his medical studies for a season.

After leaving the bookstore Little entered the office of Dr. Willard Parker as a private student, and at the same time he matriculated in the College of Physicians and Surgeons. After Dr. Little had become a distinguished surgeon, Dr. Parker gave the writer an account of how he nearly rejected him when he applied for entrance to his already crowded rooms. He was at first disposed to decline to receive another student, but he was impressed by the great earnestness of the tall and handsome young man, and he consented to take him. "But," continued Dr. Parker, "I never had occasion to regret my decision. Punctually as the clock struck nine, the click of the young man's boots was heard upon the doorstep, and I got to recognize his step and to count upon him whoever failed." The word *click* aptly describes the short and quick step that many of Dr. Little's contemporaries will recall as one of his personal characteristics.

After being in Dr. Parker's office more than two years, he successfully passed a competitive examination, and was appointed a junior assistant in Bellevue Hospital. This appointment did not take effect until the following spring. Meanwhile, in March, 1860, he was graduated at the College of Physicians and Surgeons. He then resigned his position at Bellevue, and after examination he was appointed junior assistant in one of the surgical divisions of the New York Hospital. A resignation of a place in one hospital to take a similar one in another was something unusual, and it was said at the time that it caused a little unpleasant feeling among the staff at Bellevue, for Dr. Little was well known to some of them, and to James R. Wood in particular, as a promising man whom it was not well to lose.

Bellevue Hospital was just coming into some importance as a school of surgery, and chiefly through Dr. Wood's clinics and his prizes for anatomical preparations offered for competition among the medical schools. Yet at that time it could in no manner compare with the New York Hospital in furnishing opportunities to a surgical student. It was an institution belonging to the city,

[1] Read before the New York Academy of Medicine, November 5, 1885.

receiving only paupers to its wards, and it was governed by politicians. It had much more importance as a school of medicine than as one of surgery. Dr. John W. Francis was one of its consulting physicians, and occasionally gave a mellifluous and learned address in its amphitheatre, and Alonzo Clark, John T. Metcalfe, and Benjamin W. McCready held clinics in the wards, while on Saturdays there was a great crowd of students to witness the rapid and skilful surgical operations of the renowned pupil of Valentine Mott, James R. Wood. Certainly any young doctor in medicine might have been honored by entrance into such a hospital. But the New York Hospital was a wealthy and private corporation, governed by some of the best laymen in the city, and, more than all, it was one of the most renowned schools of surgery in the world. In its amphitheatre Wright, Post, and Kearney Rodgers had won their fame, and here Valentine Mott, who was still living and lecturing upon surgery, had tied the *arteria innominata*. He was consulting surgeon with Alexander H. Stevens, John C. Cheesman, and Alfred C. Post. Of these but one now remains, an honored link to connect us to the medical New York of fifty years ago. The active members of the surgical staff were Gurdon Buck, John Watson, Thaddeus M. Halsted, Willard Parker, William H. Van Buren, and Thomas M. Markoe. Of this number but one now survives, and he happily in full vigor of mind and body. The old hospital was beautifully situated on Broadway, facing Pearl Street, on ample grounds, with grand old elms. Its beautiful lawn, upon which tame deer might often be seen, was a surprise and delight to the strangers in New York, who came suddenly upon this break in the whirl of a great city.

The house staff was in a traditional state of excellent discipline. Its members vied with one another in their care of their cases, and their dressings of fractures and ulcers were at once the delight and dismay of medical students, who followed the attending surgeons about the wards. It was not strange, then, that young Little, especially when urged by his preceptor, resigned his place in a hospital which had no past, for one whose annals, twenty-five years ago, were more full than perhaps any surgical hospital in the land.

In April, 1860, Dr. Little began his duties at the New York Hospital as a junior walker. In April, 1885, he died. Hence, it may be truly said that a quarter of a century bounded his professional career. What a twenty-five years it has been for medical and surgical science in New York and in the world! There were then three colleges, and perhaps eight hundred students and practitioners attending lectures in the College of Physicians and Surgeons in Twenty-third Street, the University in Fourteenth Street, and the New York Medical College in Thirteenth Street. Bellevue Hospital Medical College existed only in the embryo of its medical clinics and James R. Wood's exploits on Saturday afternoons. Clinical instruction was in its infancy, and there were but two hospitals, at long distances from the colleges, where it may be said to have existed in a meagre way, and then to be attended by not more than a score or so of the students, except when a great operation was to be performed. Now there are added to the New York and Bellevue the great Charity Hospital on the Island, St. Luke's, the Roosevelt, the Presbyterian, Mount Sinai, and St. Vincent's; these are all more or less used for clinical teaching, and eighteen hundred or more students and physicians attend the lectures of the three colleges of our faith, the College for Women, the Post-graduate School, and the Polyclinic.

Among the most widely known of the teachers at the Colleges were Parker, Gilman, Watts, St. John, and Joseph M. Smith, in Twenty-third Street; John William Draper, Bedford, Paine, Van Buren, Post, and Metcalfe, at the University; Horace Green, Fordyce Barker, Ogden Doremus, and Carnochan, in the New York College; while George T. Elliot, Charles A. Budd, Loomis, Jacobi, Thomas, Sands were, as would be said in Edinburgh, *extra-mural* teachers, who were nearly within the walls. So great have been the losses by death in these names, that, as we recall them, the words of the Latin poet come at once to the mind:

> "Eheu fugaces Postume Postume,
> Labuntur anni."

When Dr. Little entered the New York Hospital the civil war had not broken out, although exciting meetings of students had been held on account of the John Brown raid, and Southern students were being pledged not to return to Northern cities for instruction. Terrible strife was soon to cause the erection of immense hospitals by the medical staff of the United States army, from whose records surgical literature was to be enriched to an extent not dreamed of by the surgeons of this country. The battle-fields of Manassas, Shiloh, Gettysburg, and around Richmond, were, from their awful experiences, to train a race of men which has caused American surgery and medicine to take a higher place in the world than would have been attained by half a century of work in small civil hospitals, while the Sanitary Commission was to open up a field for the cultivation of sanitary science and of active benevolence hitherto unknown.

When Dr. Little entered the wards of the New York Hospital, the thermometer was not used to show the temperature of the body. The laryngoscope and ophthalmoscope had just been placed in the hands of a very few specialists, but they were not at all employed in the New York general hospitals.

There was but one hospital of any considerable importance for diseases of the eye and ear, and that had not one-half the number of patients it now has, although three similar institutions have been added to the charitable and educational resources of the city. There were no training schools for nurses, and scarcely any trained nurses worthy the name. Those whom we had were chiefly males, with a strong preference for alcohol as a stimulant, who had been promoted from being patients to be nurses, while the women, in many instances, had been scrubbers in the wards over which they now presided. Not but that there were some excellent nurses in those days, however. Pyæmia, erysipelas, and hospital gangrene were then dreaded foes, and antiseptic surgery, if practised in attempts at absolute cleanliness, was not understood as now, when patients, after operations, are saved, not as by fire, but as a matter of course. Marion Sims had just read his famous paper before this Academy upon silver sutures in surgery, and was about to found the Woman's Hospital and become the intellectual progenitor of men who with him created modern gynecology. All this Dr. Little saw, and in much of it he was an active participant.

New York, in 1860, had two or three medical journals, not of extended circulation, while an Ishmaelitish scribbler or two issued monthly bulletins in a style of medical journalism now happily extinct. There were two medical bookstores, called publishing houses rather by courtesy than as a matter of fact, for scarcely a New Yorker but Bedford and Dalton and Draper had written a medical book, and very few had even edited or translated one. New York scarcely claimed equal rank with Philadelphia as a medical centre.

Now, New York boasts three publishing houses where American medical books are issued, and that in considerable number. Her medical journals are more widely circulated than those of any other city in this country, and they are to be found by the side of the works of American medical men upon the library tables of the physicians of every nation.

In the hospital Little gave promise of his future career. He was assiduous and faithful as an assistant, and suggestive and enthusiastic as a house surgeon. His humorous contemporary, Dr. Samuel W. Francis, remarked of him that even then there was *multum in parvo*. He reported many of the cases occurring in the wards in the

American Medical Times. It was while in the hospital that he devised his method of making and applying plaster-of-Paris splints. It is not too much to say that chiefly, if not entirely, through Little's efforts plaster-of-Paris splints became a practical application. Until then, although much recommended, experience had shown that it was not well adapted for a surgical dressing. Little saw in plaster-of-Paris a material which, if properly used, would form that so much to be desired, an immovable and yet porous splint. Those of us who were associated with him remember his painstaking trials in preparing the plaster, in securing the proper consistency, and the material best adapted to take up the solution, the disappointments and failures until a splint was produced which convinced his colleague, the house surgeon of the other division, and the attending surgeons, that the days of the starch apparatus—a favorite bandage of the hospital—were past. In using plaster-of-Paris as a splint instead of a bandage, he utilized the material as never was before done, and although it is possible that it will never have a widespread use, just as Dr. Little employed it, he gave an impetus to the subject which was perhaps the origin of the famous plaster-of-Paris jacket. His paper upon the subject may be said to be classical.[1]

During the civil war, on several occasions, Little's services were furnished to the Government. He was for a time surgeon-in-chief to the hospital erected on the edge of the City Hall Park, and twice, at least, after great battles, he volunteered with those other New York surgeons who went to the front at the call of Surgeon-General Hammond. Now, as then, the avenues to professional success as a teacher and consultant began at service in dispensaries and clinics. Dr. Little was engaged in such work from the days when he was a medical student and a *substitute* for the junior walker in the hospital, until his death. One year after leaving the hospital he was appointed clinical assistant to Dr. Parker, who was then Professor of Surgery in the College of Physicians and Surgeons. In 1863 he was appointed a Lecturer in the College. His first course of lectures was upon "Fractures and their Treatment." These lectures were continued until 1868, when his chair was enlarged to that of "Operative Surgery and Surgical Dressings."

Dr. Little was very popular as a lecturer. His manner was exceedingly simple, in fact, at first distressingly so; but it was earnest, and devoid of mannerisms and self-consciousness. One of our most successful teachers lately said to me, "Little did not merely tell the men to apply a flaxseed poultice, but he brought the flaxseed and the cloth to the lecture-room and made the poultice before the class. Then they knew how it was done, for they had seen it." Indeed, his teaching was realistic to a degree. The man was thoroughly in love with his work. He was alive to every progressive tendency; he travelled in no rut, but was always on the alert to assist in making surgery the exact science it is so fast becoming. He took great pains with the illustration of his subject by diagrams and drawings, which were prepared by competent men under his directions with great care. An examination of his library after his death showed that he had ransacked the surgical pictures of Great Britain and the Continent to secure the best illustrations for his lectures. Certain it is, that not a little of the fame of his alma mater for thorough teaching was due to Dr. Little's lectures, although they were given in the summer term, and attendance upon them was not obligatory. They were continued for sixteen years, when he resigned from the position he held in the college as a lecturer on surgery, and one of the staff of Professor Markoe—who has succeeded Parker—and accepted the appointment of Professor of Clinical Surgery in the University of New York.

But Little's best qualities as a surgeon, a teacher, and an executive officer were seen after his appointment to the chair of surgery in the University of Vermont. This was in 1875. He had previously declined an offer of a similar chair in the Long Island College Hospital. He entered upon the work in Burlington with great zeal. There he found a medical college that still survived the vicissitudes of forty years, although those at Woodstock and Castleton, in the same State, had been abandoned. It had about sixty students. Little's keen perception of the possibilities of this field showed him that they were great. The lately elected President of the University, Dr. Buckham; the venerable Carpenter, professor of practice; with Thayer of anatomy, King of obstetrics, and Darling of anatomy, were fully alive to what lay in store for the Burlington Medical College. There was a reason for the existence of a medical college there. It was needed to supply the demand for medical education for a large number of young men from Vermont and Northern New York, who could not conveniently go to Boston, Philadelphia, or New York.

The academical department, at the laying of whose corner-stone Lafayette had assisted, embraced in its faculty many soundly educated and cultured men, whose sympathies were readily enlisted for any good scheme for the cultivation and dissemination of human knowledge. They seconded the efforts of the president to give character to the various departments. The medical school acquired a certain dignity by its name, and it had that not unimportant advantage over the schools that formerly existed in the same State. Many young men, exceptionally well prepared by previous training, found it more convenient to study in Burlington, on account of the greater expense attending a long stay in a large city; and many practitioners of Vermont and Northern New York found the clinics and lectures of the medical department of the University an accessible post-graduate school, which lighted up many a dark subject, and gave them a little recreation from their lonely and responsible duties as country physicians. The professor who went to Burlington from a metropolitan medical college soon saw that he had as intelligent and as earnest listeners as at home, and that he must relax nothing in his efforts to teach his science and art. With the hearty co-operation of the President of the University, who presided at all the faculty meetings, and his own colleagues, Professor Little immediately began to devise plans for increasing the fame and usefulness of the school. By personal solicitations in many instances, he was largely instrumental in securing courses of lectures and clinics upon subjects not fully, if at all, embraced in the general curriculum, by specialists from colleges in our city. Then, Miss Mary Fletcher, acting largely upon the advice of President Buckham and Professor Carpenter, founded a hospital, and with a broad-mindedness not always seen in those who found hospitals, gave up its wards unreservedly to the teachers of the college. This was naturally of the greatest importance to the success of the school, for the day had passed when didactic lectures, unillustrated by subjects, were considered fit means of teaching medicine and surgery. Little's facilities for the performance of great operations were largely increased by the foundation of the hospital. His clinics were sought by crowds of patients from far and near. During the weeks that he lectured in Burlington the streets of the city gave evidence, by the passing through them of numerous people with surgical dressings on some part of the body, and by the great accumulation of the mud-stained buggies of the practitioners of the adjacent towns, as well as by the overfilled wards of the hospital, that a great deal of surgical work was going on. Stimulated largely by Little's surgical feats, and by an executive capacity heretofore, from the want of an arena, not known to belong to him, the college grew apace in character, importance, and in the number of students. A new building was given to the faculty in 1884, by the late Mr. Howard, and when Dr. Little died, more than two hundred and twenty students

[1] Transactions American Medical Association, 1867, MEDICAL RECORD, 1874.

in the class-rooms of the college mourned the loss of their professor of surgery.

In an address commemorative of Darling and Little, Professor A. F. A. King sketches the introduction of the latter to the class in a manner so graphic and descriptive of the man that it is here reproduced. Dr. King says: "I introduced him to the class, and I well remember his modest embarrassment, which would, however, have passed unnoticed by the students, had he not said in the course of his first disjointed remarks, 'I'm a little nervous, as you see.' But a patient was introduced, a diagnosis made, an operation decided upon, and a knife handed to Professor Little, and I can tell you (as you know) he was not nervous *then*."

To those of us who knew Little well, it was interesting to see this preliminary nervousness when a great operation was imminent. The quick, short steps, the restless tapping of the foot when he was preparing for his work, gave little promise of the bold, self-reliant man as he stood over the patient, perhaps reeking with the perspiration of surgical ardor, but yet with steady, skilful hand working in a manner that convinced any one competent to judge, that a life given into his care would be preserved and returned, were it among human possibilities.

In Burlington as in New York, "Little's luck" became proverbial, for his operations, from causes that I am not able to analyze or define, were pre-eminently successful. A well-known surgeon in New York told me, in substance, that it was a prevalent opinion in St. Luke's Hospital, that it would be safe for Little to cut off a foot of an intestine, when another man could hardly touch it with a knife; and yet he was deferential to a fault to the surgical opinions of his peers, ready to adopt their suggestions, and to give proper credit for them. He was a man who exhibited great common-sense as a surgeon. He was not overtrained, but he knew how to get at the upshot of a case without being unduly anxious as to how Esmarch or Lister were doing that thing now.

Dr. Little's chair in the University of New York was never fully satisfactory to him. His clinics there were held but for a part of the session, and he taught but once a week, although his classes were large, and the students, at least on one occasion, petitioned the faculty that his instructions might be continued throughout the session. The request could not be granted, on account of the pressure for time in which to give the whole curriculum. Three years after his acceptance of the position, together with six members of the former post-graduate faculty of the University, he resigned, in order, in conjunction with them, to establish the *New York Post-graduate Medical School*. To this institution he gave the same hearty effort that he displayed in Burlington. His lectures to graduates were, if possible, better appreciated than by the under-graduates whom he had instructed since his early manhood. A doctor was to him a brother. Without quite knowing it himself, he acted as if he supposed that every man who sought or had acquired the degree of M.D. was as eager and honest in the pursuit of knowledge with which to save life and mitigate disease as he was himself.

It is said that he always leaned toward the student, and possibly too much, when required to vote upon an examination in the faculty at Burlington. This was not from any idea of lowering the standard of proficiency, but because he could not be made to understand that there were men who regarded medicine as a business, in which they were willing to embark with as little capital as could make a fair show. During these last three years he exhibited his best qualities of faithful work, and if, as Dr. Lloyd, one of his former office students and valued assistants, says, "he was inclined to throw off his work on other shoulders, and less inclined to undertake long and serious operations," on account of some grave symptoms in his general health, it was not apparent to those of his friends who saw him only at intervals. The last public work he was engaged in was a meeting of the Post-graduate Faculty, on the evening of March 31st, when he appeared in his usual health and spirits. At that meeting an incident occurred which was characteristic of the man. He felt impelled by his judgment to vote, on a question which then came up, contrary to his feelings. It was a question that might affect the interests of some to whom he was attached, and after he had voted and he was found to be in the majority, he expressed his regrets that he should be obliged to vote for a policy which might prove detrimental to the interests of a friend, and he vainly sought for a compromise upon the subject.

Dr. Little's services to St. Luke's Hospital were very great, and they were warmly appreciated by his patients, his colleagues, and the management. He served one term of ten years, from 1868 to 1878, when he was retired under the rules to be made a consulting surgeon. In 1882 he was reappointed an attending surgeon, and held the position until his death.

Little used to tell a story of an experience of his at St. Luke's, which well illustrates the maxim that "all men think all men mortal but themselves." He was to operate, on one afternoon, upon two cases for resection of the upper jaw. The first patient died upon the table from getting blood in the trachea, and Little sent word to the survivor that he wished to postpone the operation for him. He was very much disappointed at the delay, and urgently insisted that Dr. Little should personally visit him in the ward and tell him why he did not wish to operate upon him as appointed. The surgeon accordingly went up, and with some hesitation, on account of the probable effect upon the hopes of the candidate for an exsection, frankly told him that the first man was dead, and he did not feel like going on with a case of the same kind just at the moment. But instead of being daunted the patient exclaimed, "Oh, that's nothing! I'm not afraid. The other man was a sickly fellow. I never thought he would get through. You operate on me, I won't die." As a matter of fact Little did soon operate upon him, he got no blood in his trachea, and he did not die.

In 1876 Dr. Little was appointed an attending surgeon to St. Vincent's Hospital, a position which he held when he died. Little always believed that the kind offices of the Rev. Vicar-General Quinn, one of the managers of that hospital, were largely instrumental in securing him this position. The Vicar-General was a priest in the wards when Dr. Little was house surgeon in the New York Hospital, and in his visitations to the sick and dying in the wards, had been struck by the commanding presence, the assiduous and faithful labors of the young surgeon.

Of Dr. Little's surgical achievements in detail, I am not competent to speak, nor is it necessary that I should do so. They are indelibly recorded in surgical literature—at least in part, for of late years Dr. Little was somewhat regardless, from lack of time perhaps, from his large and exacting public and private practice, to write as much as his friends might have wished. But I may say that he was the first American surgeon to puncture the bladder with the aspirator for the relief of retention of urine. He simultaneously ligated the subclavian and carotid arteries of the right side, for aneurism of the first part of the subclavian. The operation for stone by various methods he had performed seventy-seven times, with a fatal result in but two cases. In hare-lip and strangulated hernia he also had a large and successful experience.

He entered into the advances claimed to be made by antiseptic surgery with great enthusiasm, and on his last visit to Europe, at the meeting of the International Congress in London, he investigated Lister's methods very carefully, and came back to carry out all the details of Listerism in capital operations.

He was a surgeon who looked round upon a far

horizon. Very few operations were foreign to his knife. Yet he was extremely appreciative of specialists, and while not needing their advice as much as some of those who have looked askance at them, he frequently sought their aid, and often publicly recognized their value in enlarging the field of exact knowledge. He himself used the ophthalmoscope, the laryngoscope, and other means of examination not always used by general surgeons, so that he was singularly competent to make an examination in any surgical case. In the practice of medicine also—for he by no means confined his work to surgery—he was suggestive in the matter of treatment, and had many celebrated prescriptions upon which he drew with great readiness and accuracy.

Little was a great admirer of his instructor, Willard Parker. He gave his first-born the name of his preceptor. Dr. George Shrady styles him one of his worshippers. So great was this admiration when he left the hospital, that some of his friends feared he would be content to be an imitator and never strike out for himself. He seemed to have acquired Dr. Parker's art of making surgery fascinating to students; he drew them about him in great numbers. Even if the clinical material for his hour, on any particular day, was scanty, the lecture would not betray the want, for what was there was made the subject of homely but important lessons. The capacity for dignifying the everyday work of surgical practice, for making apparently minor things and details assume their true importance, belonged to him in a great degree. He could make a good clinic from material which some surgeons would not deign to spend a moment upon. Like Willard Parker also, he attracted to himself numerous office students, who almost invariably became much attached to him.

Dr. Little was, in the good sense, a simple-minded man. He loved to sit down in such places as the office at the hotel in Burlington, and, as he became warmed in his discourse, talk to plain laymen, who understood but half of what he said, of tumors and ligations, of resections and ovariotomies, and all without any idea of boasting of his own deeds, for he had not the faintest resemblance to a braggart, but he was so interested in surgery that, like Agassiz, who talked about his study of the skeletons of fishes to stage-drivers, he fairly bubbled over upon the subject. He was fond of the meetings of the profession. Since its foundation, the New York Surgical Society was his favorite place for recounting his experience, and listening to the discourse of the distinguished men who organized and maintained this body.

He was one of the signers of the address to the profession of the State against the re-enactment of the Old Code, and the movement to sustain the Medical Society of the State had his full sympathy and co-operation.

Social to a degree, he could be found late in the afternoon, in the conversation-room or at the monthly meetings of his club, with a cigar for himself and for his neighbor, ready to discourse upon any subject that was uppermost in men's minds.

He gave great thought and spared nothing in the education of his two sons and a nephew. He had almost exaggerated ideas of the importance to a young man of an exact and thorough course of study in a college. He did not practise his profession with an idea of amassing a fortune, but he conceived that it was better to thoroughly educate his sons than to leave them the few dollars which a niggardly economy might have allowed a physician dying in middle life to put aside from his professional income. Before his death he had the great satisfaction of seeing his eldest son fully equipped and prosperously entered upon the practice of a lucrative profession. In his latter years he interested himself very much in the study of china and bric-a-brac. It became a recreation to him to visit auction rooms, and he often came away with a rare bit of some kind.

Galton describes a certain class of men as being incapable of advancing beyond a certain point in mental attainment, just as another class can only be developed physically to a certain inferior standard. Little was not one of these. As long as he lived he grew in mental capacity.

He was never satisfied with his own preparation for the study of medicine; but while he did not enjoy the advantages of a college training that he appreciated so highly in others, he had that which no conventional curriculum can of itself furnish—a receptive, inquiring, and unbiased mind in science; and as to merely scholastic attainments he might have well said as did John Hunter, when he heard that he was reproached by a rival with being ignorant of the dead languages, "I would endeavor to teach him on the dead body that which he never knew in any language living or dead." It has been said by one biographer of Dr. Little that he was a typical American. It is certainly true that his career is a striking example of how eminence in our profession may be attained by the resources of our own country. His education was wholly obtained within his own city. He had none of the advantages so useful to the best of men, so without use to many, which are to be obtained in British or Continental schools. But no man more than he appreciated the labors of foreign surgeons and pathologists, no one followed more eagerly the medical literature of his time; but he was fortunate enough never to acquire such a slavish esteem for the opinions of books that he ceased to think for himself.

The sense of humor was fully developed in Dr. Little. From the busy, and sometimes weary life of a general practitioner, and from the society of his friends, he extracted much to give zest to his work. A joke at his own expense was almost as welcome as if for another. He used to tell with great glee, and awaking much laughter as he did so, how a little trick of his to stop too prolix patients once got him into great trouble. He said that he had found a good device for interrupting a needlessly long story on the part of a patient was to ask, in the midst of the long narrative, "Please let me see your tongue." He found that patients bore this interruption very well, and that in their eagerness to get the doctor's opinion of this index of the digestion, its wagging ceased. But on one evening a friend, who was in no sense a patient, was making a call upon him, and talked long, when Little was very tired. After a time, the doctor's mind wandered afar off from the discourse to the discussion of medical cases and questions, and, turning to his friend, who was in the full tide of talk, he asked with great gravity, "Please let me see your tongue." Little was never able to explain what happened when his friend had fairly taken in the meaning of this interruption.

But you will demand an end to this desultory contemplation of the varied sides of our late associate's life and character. A quarter of a century was to be the limit of his professional life. In the apparent ripeness not of old age, but of middle life, it was ordered that his work should end. As has already been intimated, he was actively engaged at a professional meeting up to a late hour on Tuesday, March 31st, and on Saturday, April 4, 1885, he was in the life beyond. In August, 1884, it was discovered that he was suffering from diabetes. I believe it is thought, by some authorities at least, that the debility induced by this disease, the existence of which was shown by the examination after death, made him less able to resist the acute affection from which he died. At any rate it had a sensible effect upon his apparent feelings and actions as observed by his intimates. His thirst was marked, and he became much fatigued upon slight exertion. But he continued his daily work, without creating a suspicion of the existence of any serious disease, in those who saw him only at intervals, until Wednesday morning, April 1st, when he called his friend Dr. Lloyd to his office, at about ten o'clock, and he found him with his head resting upon his hand, and complaining of a severe pain in the right iliac fossa.

He asked Dr. Lloyd to attend to his clinic for that day, while he proposed to make one or two calls in the after-

noon. He then went up-stairs and took a dose of cathartic medicine prescribed by himself. At noon he said he felt better, and he went out to try and finish some work, but he soon returned, complaining of severe pain. His family physician, Dr. John S. Campbell, was sent for in the evening; when Dr. Campbell arrived he ordered a dose of castor-oil, which he had seen relieve similar attacks in Dr. Little. The night passed without a movement of the bowels, and with a steady increase in the pain. Early in the morning he sent for Dr. Lloyd and gave him the necessary instructions in regard to his practice. When Dr. Campbell came for his morning visit he advised that Dr. Loomis be sent for in consultation, and when he came, although he thought there was beginning typhlitis, he advised a dose of calomel. He also had seen Dr. Little in similar attacks, which had been relieved by cathartics.

No alleviation of the pain was obtained, nor did the bowels respond to the frequent calls made upon them; and Friday, owing to the increase of the pain, it was found necessary to resort to the hypodermic injection of morphine. It was also noticed that there was a localized peritonitis, and when Dr. Campbell arrived, Dr. Sands was also called in consultation. By the time he arrived, in the afternoon, the inflammation of the peritoneum had become general, and it was a question whether it would be wise to operate. This was advised against, however, when the existence of the constitutional disease was fully considered. Although the hypodermic was used freely all Friday night, it was found on the morning of Saturday that the peritonitis was much aggravated. On this morning he sent for Dr. Lloyd, and when he got to the room he found him, in spite of the peritoneal inflammation, sitting in a chair by the side of the bed. As Dr. Lloyd entered the room he asked if he thought he looked much worse than the day before, and then immediately began to give instructions with regard to some business for the University of Vermont, which he thought ought to be attended to without delay. It was suggested to relieve the distention of the bowels by an aspiration, but he objected, and the matter was not urged. Dr. Lloyd, from whom I received these particulars, then continues: "After remaining with him for some time, I left to attend to the calls, and was probably absent about an hour. Upon my return I was met at the door by one of the servants, who asked me to hurry to the room, as the doctor was worse. Hurrying up-stairs, I found Drs. Campbell and Powell already there, and that collapse had set in a few minutes before. Just before my arrival the doctor had asked Dr. Campbell, 'Doctor, don't you think a little digitalis would be good for this failing heart of mine?' Dr. Sands was also sent for and arrived in a very few minutes; but there was nothing to be done, and we now knew that the end was nearing fast. As I entered the room the doctor held out his hand with the expression, 'Lloyd, I am going now;' and then, a minute later, again calling me by name, he said, 'I now realize the truth of what poor Beard said.'[1] During all this time he was suffering intensely, but his mind was entirely clear, and his spirit undaunted by the fast approach of death. He summoned the household servants and family about his bedside, and casting anxious glances at a clock that was in his chamber, he plainly showed that he was counting the moments that he still had to live. Having bid farewell to each one by name, and with the words, 'I die in the Christian faith' upon his lips, there was a final instant of distress, when this brave man yielded up his spirit to the God who gave it."[2]

ANTIPYRINE AND SWEET SPIRITS OF NITRE are incompatible, according to Dr. Eccles.—*N. Y. Medical Journal.*

[1] This refers to the words of the late George M. Beard, in which he expressed his regrets that he could not express the thoughts of a dying man.

[2] At the autopsy a perforation of the vermiform appendix was found, and also a hardened mass of fæces, which was the probable cause of the ulceration; and there were proofs in the condition of the liver and kidneys of the existence of diabetes.

URETHRAL IRRITATION IN THE MALE THE CAUSE OF CERTAIN NEUROSES, AND ALSO OF ACNE.[1]

BY LEGRAND N. DENSLOW, M.D.,

ST. PAUL, MINN.

ALTHOUGH of late years much has been written about urethral irritation and its relation to nervous disturbances, I am inclined to think that its importance is far from being appreciated as yet. This conviction is the only apology I have to offer for trespassing upon your time, by recounting a few cases that have come under my observation recently. Dr. Otis, at a meeting of the New York Dermatological Society a little over a year ago, read a very interesting paper on contractions of the meatus urinarius as a source of reflex irritation in the brain and spinal cord; his cases, together with mine, make such an interesting series that I shall briefly refer to them. The first was a case of contracted meatus in a physician, associated with mental depression so great as to render all his mental processes unreliable, and to make him feel as if he did not care to live. These symptoms were entirely relieved by simply stretching the meatus three or four millimetres. The patient would not accept division, and he was obliged to dilate at intervals, each dilatation being followed by prompt relief. Again, case of a physician who had been subject to attacks of profound mental depression, coming on without apparent cause. This trouble he bore until he was past forty years of age, when to it were added various reflex nervous difficulties—among these a feeling of wetness in the urethra, and a bearing down in the perineum. A sound was passed and gave immediate relief, which continued for several weeks. A year afterward the meatus was divided, with the effect of permanently removing his nervous trouble. The same writer speaks of two cases who were subject to daily epileptic attacks, in both of which there was entire relief after division of the meatus. In one case it was found necessary to cut several times before the tendency to recontraction was entirely overcome, and the symptoms permanently relieved. The most interesting case described in his paper, and illustrative of another class of cases in which the reflex irritation falls more particularly upon the spinal cord, occurred in a child, aged three. As an infant it was restless and fretful, had frequent erections and enuresis; at two and a half years it was still in bad general condition and suffered from bilious attacks. About this time it was circumcised, with relief, though the attacks continued at night. Although there was no evidence of spinal disease, there was marked difficulty in locomotion, the child stumbling in his walk, with the right foot turned in, and falling every few steps. The meatus was found to be contracted and was cut, the operation giving great relief; but the meatus having again contracted, it was found necessary to cut again. To avoid hypospadias this operation was very carefully performed and repeated ten times, until no further recontraction took place. These numerous operations were found necessary, as the symptoms would return with the slightest recontraction. The child was seen two years after the date of the last operation, and found to be fat and well. My first case is similar in some respects to this last one.

CASE I.—April 3, 1885. C—— had gonorrhœa twenty-two years ago, discharge lasting several months. During treatment a piece of nitrate of silver was accidentally dropped in the urethra and allowed to dissolve. Patient complains of sensation of weight in the perineum, and pain in the same region during emission. There are darting pains through thighs and down the legs, the feet feel heavy and numb, and occasionally it is only with great effort that he can walk steadily. There is almost constant occipital pain, and the patient has about made up his mind to give up a good position. Upon exam-

[1] Read at the Ninth Annual Meeting of the American Dermatological Association.

ination the normal urethra was found to be 34. There were strictures at 1 inch, No. 24, from 1¾ to 2¼ inches from 22 to 24, this one being particularly dense and showing the result of the nitrate, and one at 4½ inches, No. 19. All were incised to 36, and during the course of the next six weeks all the disagreeable symptoms disappeared.

Case II.—May, 1883. O——, aged forty-two, married, of good habits, uses no liquor or tobacco, is in perfect health. Complains that he has been impotent for eight years, and that the condition came on gradually. Upon examination meatus measured 16 (normal 34), otherwise urethra normal and not sensitive; the meatus was incised to 35 and a cure effected within a week. This occurred two years ago, and I have heard recently from the gentleman, that at present there is very little probability that any further treatment will be necessary.

Case III.—June 15, 1885. G——. Gonorrhœa seven years ago, which lasted about one month. Before he was entirely well he had connection with dissolute women, several times every night, for two weeks; at the end of that time he fell down in a fit, bit his tongue, etc. These attacks have occurred every few days, sometimes every day, until the present time. He is a printer, and has frequently fallen from his stool while at work. Had last attack yesterday. Stream of urine very small. Upon examination, normal urethra 34, meatus 29; stricture at 2 and 3½ in., admitting 29,; 4½ in., 26; 5½ in., 7. Following the examination he had a severe epileptiform attack. For the next week the lower stricture was stretched every other day until 22 was reached. The patient then had a pleurisy, from which he has not sufficiently recovered to proceed with urethral treatment. He has not had an epileptic attack since the day mentioned.

Case IV.—February 12, 1885. S——, aged thirty, single; no venereal disease. Complains that during the last year his hair, both on head and body, has been falling rapidly. He has a very extensive hirsute growth over the entire body, and upon removing the underclothes they are found to be lined with hairs. The scalp and a small spot on chest are found to be the seat of a seborrhœa, for which appropriate remedies were applied. The skin over the entire body is, to all appearances, in a perfectly healthy state. Thinking that the trouble must be reflex, I examined the urethra and found the prostatic portion highly sensitive. From this time patient was seen every other day, and sound passed. March 1st, less hair falling. March 11th, continued improvement. March 15th, scarcely any hair falling. March 31st, hairs on body firm, none falling. Within a few days the patient has been heard from, and there has not been any return of the body trouble, although hairs still fall from head and chest. I am not aware that general alopecia was ever before treated through the urethra. The result followed the treatment so rapidly, and proved so radical, that there is no doubt in my mind that the cause in this case was discovered.

Case V.—S——, aged twenty-six. Has had a constant neuralgia of the right testicle for past eighteen months. Had gonorrhœa two years ago, which lasted three months. There are numerous acne pustules scattered over the face. The patient told me subsequently that he has never been free from them since he was twelve or fourteen years of age. Has been impotent for past six months. Upon examination (normal urethra 34) meatus 26. This was enlarged to full size, and the deep urethra treated with sound. Within a month the acne had disappeared and the neuralgia was very decidedly improved, and after three months' treatment the neuralgia was cured by the systematic use of the sound together with galvanism. This case is an interesting one from the fact of the acne disappearing so rapidly. No mention was made of the acne either by the patient or myself until about one month after treatment commenced, when the patient informed me that he had "always had pimples" until the present time, and asked if I thought the operation and treatment had anything to do with their disappearance. This patient has been seen by me within a few days, and there is no return of the acne, and but occasional slight pain in the testicle. Upon further examination of his urethra with bulbs, a stricture of large calibre was found, three and a half inches from the meatus, measuring 32. I have every reason to believe that the remnant of the neuralgia is due to this contraction.

Case VI.—June 20, 1885. W——, aged twenty-nine. Prominent member of the bar and hard student. Has been morbid more or less as long as he can remember. Within two or three years has become abnormally sensitive, and finds that his mental processes are becoming obscured, has great difficulty in fixing his attention, and it is only with effort that he can grasp the subject of his reading. Upon examination of the penis find that he has been circumcised; the meatus 24 (normal 30) and lips protruding; the entire urethra exquisitely sensitive. The meatus was incised and a full-sized sound passed regularly. At this date, August 20th, the urethra is not sensitive, and the patient declares that mentally he is another man, that he is no longer despondent, and that within a week he has passed through a trial that prior to the operation would have "about killed him." I can notice a great change in his nervous condition. This patient applied to me for an aggravated case of acne, situated over the entire back from shoulders to buttocks, of fourteen years' duration, which has entirely disappeared without other treatment.

Case VII.—October 11, 1884. A——, aged fifteen. Had comedo when six weeks old, which disappeared in a few weeks. Normal skin thick and greasy. At present the whole face, ears, neck, and shoulders are covered with acne to an extent worse than I ever saw before, several abscesses being two inches in diameter, and a greater part of the skin of the face being infiltrated with pus, serum, and sebaceous matter. Disease commenced two years ago. Locally I treated him by opening abscesses and applying hot water, and gave gr. vj. ergotine t.i.d. By December 13th the acne had all cleaned up, except a few pustules on the back of the neck. At this time the urethra was examined. Meatus contracted to 27 (normal 34) and prostatic urethra very sensitive. As operation was declined, sound No. 27 was passed frequently for about six weeks, when urethra was no longer sensitive. During this time ergot was discontinued, but improvement continued until but very few pustules appeared on the neck.

April 18th.—No treatment but hot water for past two months, and slight relapse on neck. Ergot given again, and in a month the eruption had all disappeared. A few days ago he presented himself, having neglected treatment for the past two months. There was a decided relapse, principally about the neck and angle of jaws. There are many points of interest about this case: first, the fact of the skin being predisposed to acne, as shown by comedo appearing at the age of six weeks; second, the rapidity with which the disease disappeared under the use of ergot; third, the fact of improvement continuing when sounds were substituted for ergot; fourth, relapse occurring upon discontinuing either sounds or ergot. As the deep urethra is no longer sensitive it would be fair to presume that the acne is kept up by the contracted meatus, as it improves always after passing a sound. I regret my inability as yet to prove this.

Case VIII.—June 22, 1885. W——, aged thirty-one. Has suffered from acne for years. At present back is pretty well covered from shoulders to lumbar region. Urethra 30; meatus normal. Strictures Nos. 26 and 28 at one and two inches, the entire urethra very sensitive, and particularly so in the deeper portion. Treatment: Sounds passed every other day.

July 7th.—Acne has disappeared. At this time patient was ill and obliged to stay at home for two weeks,

and at the end of that time a few more pustules had appeared. At the present time there is no acne.

I simply present these as an interesting group of cases. I have no theory to offer, but would call particular attention to the case of general alopecia cured, and also the result in the cases of acne, adding, as they do, evidence as to the efficacy of Dr. Sherwell's treatment by sounds, suggested by him at the last meeting of this Association.

A CASE OF GUMMA OF THE CONJUNCTIVA.

By LE ROY POPE WALKER, M.D.,

LATE HOUSE SURGEON NEW YORK EYE AND EAR INFIRMARY, MEMBER AMERICAN OPHTHALMOLOGICAL SOCIETY, FELLOW NEW YORK ACADEMY OF MEDICINE, ETC.

E. L——, sailor, aged twenty-five, was admitted to the New York Eye and Ear Infirmary (service Dr. W. F. Mittendorf), September 17, 1885, with a well-developed gumma of conjunctiva and a circumscribed scleritis of three weeks' duration, left eye.

He gave a clear history of infection, one year ago, which had been treated in a desultory manner at Constantinople, Turkey, and again, in London, England.

The gumma was located at the sclero-corneal margin, upper and outer quadrant, with a base 3½ mm. in diameter, and an elevation of 1½ mm. There was mild ciliary injection. Cornea and aqueous humor perfectly clear; no signs of iritis. Iris dilating and maximum readily. He also had a mild form of scleritis, limited to inferior segment; no swelling or bulging. His general health was excellent, presenting no other evidence of syphilis.

Began immediately with inunctions of mercury, together with pot. iodide, grs. x., and instillations of atropia, grs. ij. to ℥j., three times a day. He was also given a collyrium of boric acid morning and evening.

Third day, slight ptyalism. Inunctions discontinued. Pot. iodide, atropia, and boric acid as before, and, in addition, a gargle of pot. chlorate ordered every hour. Gumma much diminished, and circumcorneal injection fast disappearing, as also scleral congestion. He experiences now no inconvenience from movements of lids over gumma, of which he previously complained.

Seventh day, salivation entirely relieved, ciliary injection rapidly fading, and gumma reduced two-thirds. Pot. iod., atropia, and boric acid continued.

Fourteenth day, gumma has entirely disappeared, with only a *very faint* injection of scleral vessels in region of recent scleritis. Same treatment continued.

Discharged on the twentieth day, cured, only one or two small scleral veins showing, as evidence of former trouble. This case is reported mainly to demonstrate the efficacy of rapid mercurialization in syphilitic affections of the eye, and also to show their tractability when energetically treated.

NITRITE OF SODIUM IN GOUT EPILEPSY.—Dr. J. Mortimer Granville writes to the *British Medical Journal*: "I am obtaining highly satisfactory results in epilepsy associated with gout with the following formula: ℞. Sodii nitritis, gr. xxxvi.; sodii hippuratis, ℥ iij.; infusi serpentariæ, ad ℥ xii. Misce. Two tablespoonfuls are to be taken three times a day before meals. The dose of the nitrite of sodium may be increased by one grain after each fit which occurs subsequently to the commencement of the treatment. The mixture should be used regularly for about three or four months; the dose of the sodium nitrite being increased, as I have suggested, until it reaches fifteen grains. In a number of cases recently treated in this way, the fits have ceased before the progressive augmentation of the nitrite raised the dose to ten grains. I am very confident that the profession will find the combination worthy of a trial. If there be constipation or a jaundiced appearance at any time during the treatment, I give the following pill several successive nights until the condition is improved: ℞. Iridin., gr. ij.; extracti cascaræ sagradæ, gr. iij. Misce. Ft. pil."

Clinical Department.

A REMARKABLE CASE OF ASCITES.

DR. WILLIAM A. MCDONALD, of Lynn, Mass., reports the case of a woman, about fifty years of age, who came under his care in December, 1880, suffering from an accumulation of fluid in the peritoneal cavity. She stated that the abdomen had been tapped six weeks before, while she was living in the West. Dr. McDonald introduced the aspirator needle and drew off twenty-two quarts of fluid, and from that time until the present the operation has been repeated at intervals of about two weeks, from sixteen to twenty quarts being removed each time. Examination of the urine failed to reveal any cause for the ascites, and neither the liver nor the heart presented any symptoms of disease. Medicinal treatment was ineffectual in preventing the exudation or in promoting its absorption. The patient has now furnished about five hundred gallons of fluid, but seems to have suffered in no way from this abnormal excretion, her general condition presenting no change save that incidental to increasing years.

THE CHLOROFORM TREATMENT OF TAPE-WORM.

DR. L. E. BORCHEIM, of Atlanta, Ga., writes: "Having been one of the opponents of the method of treating tape-worms to a dose of chloroform, I think it my duty to record the result of a more extensive experience with this remedy. I have employed it in six cases since the publication of my last letter, and in all with success, and without any unpleasant effects worth mentioning. The promptness of the action of the drug is such that I think it should receive the preference over others, at least for the first attempt. Should it fail (and what remedy is there that will not sometimes fail?) the inconvenience suffered by the patient is so slight that he will not hesitate to repeat the dose should it be deemed advisable. My plan is to order an early and light supper, and then instruct the patient to take before breakfast, the following morning, one drachm of chloroform, with from one-half to two minims of croton-oil. A prompt action is insured by the croton-oil, and to it, I believe, is due in great measure the success of this mode of treatment." [The writer is, we fear, a little too positive in his assertion of the harmlessness of chloroform. Cases have been reported in these columns, and elsewhere, in which alarming symptoms have followed the exhibition internally of this drug, and we should not be surprised to learn that its use in this manner had even been attended by fatal consequences.—ED.]

POISONING BY CHLORATE OF POTASSIUM.

DR. SIMMONS B. JONES, of Charlotte, N. C., reports the following interesting case: A little girl, nine years of age, had been under his care for a slight fever, with weak pulse, nausea, and continual vomiting, but, having apparently recovered, was dismissed as cured. On the day following, July 26th, the child had a sore mouth, and her mother gave her a paper containing something over an ounce of chlorate of potassium, allowing her to take it *ad libitum*. The girl liked the taste, and ate the crystals all day, consuming in this way between two and three hundred grains. At about two o'clock on the morning of the 27th the patient awoke vomiting. When seen some five hours later she was deathly pale, with blue lips, and a very rapid and feeble pulse, and presented exactly the appearance of one who had had a sudden and copious hemorrhage. "I had no idea at this time of the cause of the trouble, the parents having said nothing about the chlorate of potassium, believing it to be a harmless drug; but I suspected poisoning. The patient

remained in this condition the three following days, vomiting and being unable to retain any food, and passing no urine. On the fourth day I introduced a catheter and drew off about five ounces of smoky urine, which, on examination, was found to contain albumen, casts, and altered blood. Dr. H. Formad, of the University of Pennsylvania, who examined a specimen, reported: 'I fully coincide with you about the urine; it contains a very large quantity of granular blood, epithelial casts, and free blood, showing a profound renal affection.' The urine was drawn for several days, and then began to be passed naturally in sufficient quantity, the blood disappeared, and the water resumed its normal color. An analysis, by Dr. Hannah, of eight ounces drawn the second day, showed six grains of potassium chlorate. The vomiting continued until August 14th, the matter vomited consisting of dark green mucus of an offensive odor. On August 16th there was seen an eruption of small maculæ of a purple color, upon the forearms. The temperature rose to 100° on the 20th, the submaxillary glands became swollen, the throat was red and œdematous; the patient sank gradually, and died on August 26th. She never complained of much pain, and there was no tenderness over the stomach. The bowels were at first constipated, but when action was solicited the matter passed was dark and resembled the urine in appearance. There was complete anorexia throughout the entire period. Life was sustained by enemata of beef, peptonoids, and milk until the rectum became too irritable to retain the injections. After the vomiting had ceased, the patient was able to retain a little buttermilk. During the first few days much relief was obtained by warm baths, which were always followed by profuse perspiration and quiet sleep." No autopsy could be obtained.

TREATMENT OF A REBELLIOUS CORN.

Dr. R. C. Newton, Assistant Surgeon, U.S.A., writes from Fort Elliott, Texas, concerning a soldier, thirty-three years of age, who was suffering from a large callosity, caused by a splinter which he had run into the sole of his foot two years ago. The callosity resembled an ordinary corn, but was as large around as a quarter of a dollar, and gave but little pain except when the man walked about. The corn was vigorously treated by excision, poulticing, scraping, salicylic acid, cannabis indica, collodium, etc., but without avail, for each time that it was removed it grew again with most commendable persistency. Anti-syphilitic treatment was also tried without success. Finally Dr. Newton had resort to liquor potassæ, as recommended by Erichsen for callosities, and, after making applications twice a day with this substance for a period of four months, was rewarded by seeing his patient cured and returned to duty.

THE BAROMETER AS A GUIDE TO HEALTH.

Dr. M. A. Veeder, of Lyons, N. Y., has been led by his observations to believe that the barometer may become an instrument of as great value in saving life as it is now in saving crops or ships. It is a familiar fact, he says, that many persons who are afflicted with rheumatism are able to foretell changes of the weather by means of the aches and pains that they experience. Persons who are subject to headache, also, are apt to suffer most when the mercury in the barometer is changing its level rapidly, as, for instance, before a thunder-storm. The cause of these symptoms appears to be a difficulty in the adjustment of the volume and rate of the circulation of the blood to the varying atmospheric pressure upon the surface of the body. Ordinarily the results are not serious, and but little attention is given to the subject. The question arises, however, as to whether there may not be a class of cases in which the movements of the mercury in the tube may become of great prognostic import. Dr. Veeder says that he has noted the occurrence of several deaths from apoplexy at times when rapid fluctuations of atmospheric pressure were indicated by the barometer; and he believes that at such times over-excitement, over-eating, improper clothing, and the like, may induce consequences most disastrous to those who are predisposed to apoplexy, the weakened blood-vessels being already subjected to unusual strain by reason of the unfavorable atmospheric conditions. Although the cases observed by the writer thus far are not numerous, yet he maintains that the probabilities with regard to the matter are such that it is the part of wisdom that those who are advanced in years, or subject to symptoms that indicate an apoplectic tendency, should be warned to exercise great moderation in all things, whenever the mercury is seen to be unusually active in its movements.

A CASE OF INTRA-UTERINE SUPPURATION.

Dr. Hamilton Vreeland, House Physician and Surgeon in the Jersey City Hospital, reports the following interesting case: Mrs. J——, primipara, twenty-four years old, was admitted to the lying-in ward, with a history of being fully nine months pregnant and of having enjoyed good health during that entire period. Examination of the urine at three different times showed a specific gravity of 1.024, no albumen and no casts. The patient remained in the hospital ten days, doing light work about the ward, and being apparently in excellent health. On the eleventh day she kept her bed, complaining of pains in the back, and during the day vomited a small quantity of greenish material, but ate the usual quantity of food. In the evening labor began, the membranes ruptured, discharging a small quantity of liquor amnii, and the head descended into the pelvis. At about midnight the patient began to complain of thirst, the skin was dry, pulse 110, and the pains grew weaker until nine o'clock the following morning, when they ceased. At this time the occiput was under the pubis, but the woman was cyanotic, and the pulse was 120 and feeble. The head was now delivered with the forceps, and this was followed by a gush of sanguineous pus and mucus of a most disgusting odor. Ergot and stimulants were administered, but no uterine contractions followed, and the delivery was completed by traction upon the chin and occiput. The fœtus was large and fully developed, and had apparently been dead about two weeks. Its extraction was followed by another discharge of pus. The placenta was firmly adherent and was removed by the hand introduced into the uterus. There was no hemorrhage, but the patient remained cyanosed, with feeble and rapid pulse and cold extremities, and sank rapidly until death supervened. At the autopsy, made twenty hours after death, the right heart was found to contain a white clot filling both auricle and ventricle. The abdominal cavity contained a pint of dark brown fluid, but no pus and no fibrinous exudation. The stomach and intestines were congested, and markedly distended with gas. The uterus was the size of a large cocoanut and was the seat of three small fibroids. The walls were thin and succulent on the inner surface, exuding pus when squeezed, and the cavity contained purulent matter and blood-clots. There was no pelvic abscess nor sign of inflammation around the uterus or vagina. The woman had denied receiving any injury, but the husband stated that, two weeks before entering the hospital, she had, in a fit of frenzy, pounded her abdomen, exclaiming that she would kill the child. There were, however, no signs of any bruises, and the woman presented no untoward symptoms prior to the day on which labor began.

Dundakine.—This is a bitter resinoid substance, soluble in water and alcohol, obtained from the bark of the *sarcocephalus esculenta*, growing in Senegal. According to Haeckel, it possesses astringent and antipyretic properties, and has been proposed as a substitute for quinine.

Progress of Medical Science.

THE ETIOLOGY OF CHRONIC NEPHRITIS.—At the last meeting of the French Association for the Advancement of Science, M. Lépine delivered the following opinions on the etiology of Bright's disease. The cases may be arranged into two classes, the first of which is dependent on a habitual dyscrasia, using this word in its widest sense—*i.e.*, any modification in the constitution of the blood. The second class consists of "ascending nephritis," among which may be reckoned microbic pyelonephritis, arising independently of any previous alteration in the urinary passages, and the real occurrence of which is said to have been proved by the experiments of Lépine and Roux. The relatively tardy elimination of iodine by the urine after its subcutaneous injection is given as a sign of chronic nephritis.

ELEVATION OF THE ARMS AS AN INDICATION OF PERITONITIS.—Dr. Lediard, in *The Lancet* of September 19, 1885, refers to this subject. He calls to mind that there are various circumstances rendering the attitudes assumed by the sick of great diagnostic value. It may be that extreme restlessness, delirium, or fear, may prevent accurate noting of the pulse, temperature, respiration, or even physical examination of diseased organs. Again, deaf-mutism, malingering, a foreign language, etc., may further entail difficulties in diagnosis which might be in some measure overcome by the observance of a well-established position pathognomonic of a disease. He then alludes to one disease and one posture, which seem to be rarely dissociated, at least in the adult. Many years have passed since he was first struck with a posture which he has generally found to be a truthful indication. On November 19, 1871, a waiter, aged twenty-two, was brought into the Edinburgh Infirmary, under the care of the late Professor Spence, whose house-surgeon he then was. The patient had been stabbed in the abdomen, and a foot of small intestine was protruding. On the day following admission the patient was noticed to keep his hands above his head with the elbows out—*i.e.*, in a position often assumed when one is lying on the grass in summer enjoying the sounds of nature. Subsequently, but within twenty-four hours, he was observed to raise the left thigh; finally, the hands were constantly behind the head and the knees completely drawn up. Death occurred on the fourth day from general peritonitis. In peritonitis following the operations for hernia, gastrotomy, ovariotomy, ruptures of the bowels following violence without external mark, and in puerperal peritonitis, the author has constantly observed the position taken by the patient to be similar to that described. The raising of the arms is, in his belief, coincident with the commencement of peritonitis, and when the inflammation is at its height the hands will be clasped behind the occiput. The explanation is simple enough; the object being to lift all pressure from the distended bowels, the respiration becomes thoracic and the diaphragm fixed; by raising the arms the pectoral muscles elevate the ribs, and more room is thereby allowed for lung expansion; the raising of the arms moves the scapula upward and forward, and the serratus magnus being drawn upon still further tends to relieve the thorax from pressure, while the dorsal position of the trunk with an extended spine favors respiratory movement.

GENERAL CARCINOSIS—APPARENT RECOVERY.—Dr. Brunon relates in the *Gazette des Hôpitaux*, No. 61, 1885, the case of a woman, thirty-two years of age, who had suffered for eighteen months from a rapidly growing tumor of the left breast. After having existed for ten months the tumor ulcerated and then cicatrized, being somewhat smaller than before. Two months later the right breast became similarly affected, and the patient entered the Hôtel Dieu. She was then markedly cachectic and seemed to be rapidly nearing death. In the left mamma was a hard tumor, the size of an egg, firmly adherent to the surrounding tissues, with hard cords radiating in all directions beneath the integument. In the right mamma was a tumor of similar appearance but not so far advanced. The supraclavicular and axillary glands of the left side were enlarged and indurated, and the left arm was œdematous. The liver was enlarged, and there were numerous hard, movable nodules, the size of a hazelnut, in the skin of the abdomen, chest, and neck. There was also an effusion into the pleural and peritoneal cavities. The author regarded the case as one of general carcinosis, originating in a scirrhus of the breast, and looked upon it as hopeless. But on general principles he ordered nutritious food and syrup of the iodide of iron with arseniate of sodium. Under this treatment the patient began to improve in general health, the swollen glands grew smaller, the œdema of the arm disappeared, the tumor of the left breast decreased steadily in size, and the nodules of skin disappeared entirely. The author maintains the correctness of his diagnosis, and says that syphilis was certainly to be excluded. In referring to this case a writer in the *Centralblatt für Chirurgie*, No. 37, 1885, relates a very similar one reported by Dr. Gluck at a meeting of the Berlin Medical Society. In this case a typical carcinoma had been removed from the breast by von Langenbeck four years previously. Two years later there was a return of the disease in the cicatrix, in the form of "cancer en cuirasse," which increased, despite arsenic injections, and finally converted the entire breast into a suppurating mass. There were also some seventy or eighty tumors, from the size of a pea to that of a hazelnut, in the surrounding skin. There was œdema over the thorax and on the arm, the knee was the seat of an exudation, and the chest contained a bloody fluid. Under injections of arsenic and morphine, and treatment of the suppurating breast with iodoform and sublimate, the abscess healed, the articular exudation was reabsorbed, and the cutaneous nodules disappeared. And at the time the report was made it was stated that the disease had been so far recovered from that "no surgeon would now advise the removal of the breast."

RESORCINE IN GONORRHŒA.—Dr. A. J. Munnich has treated a number of cases of gonorrhœa in the following manner: The patients are instructed to drink as much water or milk as possible, so as to be able to pass water and wash the pus from the urethra before each injection. Then, every two hours during the day, and at least twice during the night, an injection is made of a syringeful of a three per cent. solution of resorcine, the fluid being allowed to flow away immediately. On the fourth or fifth day the secretion will be much reduced, and it will be necessary to practise the injections but three or four times during the day and once at night. Treatment should be continued for about a fortnight. Dr. Letzel has also used resorcine with success in upward of fifty cases. In some the treatment had to be discontinued by reason of the irritation to the urethra caused by the drug, but in about eighty-five per cent. the result was most satisfactory. It is necessary, however, to take great care as to the quality of the drug used. Chemically pure resorcine is snow-white, and forms a perfectly clear solution in distilled water.—*Deutsche Medicinal-Zeitung*, September 10, 1885.

URETHAN, A NEW HYPNOTIC.—This substance ($NH_2CO_2C_2H_5$), which was first employed by Schmiedelberg in experiments on animals, occurs in the form of white, odorless crystals, readily soluble in water, and has a not unpleasant taste suggestive of saltpetre. Von Jaksch (*Deutsche Medicinal-Zeitung*, September 14, 1885) has given the drug to man in upward of one hundred cases, in doses of about fifteen grains. He found that its action was exerted chiefly upon the brain, having no appreciable influence over the peripheral nerves. It seems, therefore, to be a pure hypnotic, having no influence in arresting cough or in quieting neuralgia, or the lancinat-

ing pains of locomotor ataxia. The writer states that it is very well borne, has no unpleasant secondary effects, and causes a quiet and seemingly normal sleep. He recommends its use, especially for children and in delirium tremens and mania. It may be given in simple aqueous solution.

CHERRY-LAUREL WATER AS A LOCAL ANÆSTHETIC.—Dr. Fodor has successfully employed urethral injections of cherry-laurel water for the production of local anæsthesia prior to catheterization. It is injected ten minutes before the introduction of the catheter, and allowed to remain up to the moment of the operation. The author recalls the fact that oculists formerly used cherry-laurel water, or dilute hydrocyanic acid, as an eye-wash in painful affections.—*Deutsche Medicinal-Zeitung*, No. 73, 1885.

FATAL SUBLIMATE POISONING.—Dr. H. Keller relates the case of a woman, fifty-two years of age, from whom the uterus was removed through the vagina on account of carcinoma. During the operation the wound was thoroughly irrigated with a 1 to 4,000 sublimate solution. The next day two vaginal injections, of about a quart each of the same solution, were made. The following morning there was diarrhœa with tenesmus, and in the evening the patient had bloody stools, with a small pulse of 156 to the minute, great thirst and restlessness. She passed about ten ounces of bloody urine containing hyaline, granular and epithelial casts, and renal epithelium. The day following this the patient died. The writer thinks that corrosive sublimate should not be used as a disinfectant in cachectic and anæmic individuals, or in those suffering from renal disease.—*Centralblatt für Gynäkologie*, No. 32, 1885.

CONCEPTION AFTER SCRAPING OF THE UTERINE CAVITY.—B. Schultze warns against the use of the curette in women not past the child-bearing period, believing that thereby conception is rendered difficult, if not impossible. But Düvelius has collected sixty cases in which conception followed the scraping of the uterine mucous membrane, and Benicke has reported ten of the same nature. In three of the latter group the curette was employed twice. In these ten cases there were thirteen conceptions within sixteen months—five abortions, and eight pregnancies going to full term. In two cases conception followed within five weeks after the operation.—*Wiener Medizinische Wochenschrift*, September 5, 1885.

SUGAR IN THE BLOOD OF CARCINOMATOUS PATIENTS.—After the publication of Freund's statement that he had found sugar in the blood of seventy patients with carcinoma, and none in the blood of thirty individuals who were also ill, but had not cancer, Mátrai undertook some investigations in the same direction. He found sugar in the blood of eight patients with cancer, out of eleven examined, and also in four out of an equal number of non-cancerous invalids. These four were all markedly cachectic, and it is to this condition that Mátrai refers the presence of sugar. Claude Bernard's experiments showed that, if a dog were bled, the last part of the blood which flowed away contained sugar. But in cachexia the blood is reduced in quantity, and it is to this cause that the presence of sugar is to be attributed.—*Deutsche Medicinal-Zeitung*, September 14, 1885.

NERVE-STRETCHING.—In a thesis with this title, published in the *Gazzetta Medica di Roma*, Nos. 18 and 19, 1885, Dr. Vincenzo Morini concludes that the procedure may be employed in all forms of neuralgia, especially of rheumatic or traumatic origin, when the usual remedies have proved ineffectual, and when the pain is known not to proceed from the irritation of a tumor, cicatrix, or the like. In case of the sciatic nerve it is practicable to first attempt stretching by flexing the thigh, with knee extended before resorting to an operation. Nerve-stretching is also indicated in ascending neuritis, reflex epilepsy, and muscular contracture or spasm of peripheral origin, especially when traumatic. It is generally contra-indicated in secondary facial neuralgia, and in such cases, instead of promoting a cure, may even cause a more or less prolonged paralysis. In traumatic tetanus this procedure is not specially contra-indicated, and may indeed be tried with advantage if the source of irritation be well determined, and if all the principal nerve-trunks supplying the part be stretched. It is of no avail in any form of central disease, though, when the sciatic is the seat of pain, some amelioration of this symptom may possibly be obtained by resorting to stretching without operation. In other neuroses it is better to abstain from any attempts at nerve-stretching, at least until it has been more clearly determined what conditions are benefited by this procedure and what are not.

SUBDIAPHRAGMATIC ABSCESS WITH THE PHYSICAL SIGNS OF PLEURISY.—Dr. E. Waahlen relates in the *Upsala Läkareförenings Förhandlingar*, vol. xix., 1885, the case of a woman, thirty-eight years of age, who suffered from acute general peritonitis. On the first examination the lungs were normal, but two weeks later dulness on percussion and absence of respiratory sounds were noted from the third intercostal space anteriorly, and from the spine of the scapula posteriorly, to the base of the lung. At the border of this area of flatness there was bronchial breathing, and, higher up, vesicular respiration. The patient was so weak that nothing could be learned from the vocal fremitus, and a few days later she died. At the autopsy there was found diffuse suppurative peritonitis, but in addition there was an encapsulated abscess between the upper surface of the liver and the diaphragm. The latter was pushed up anteriorly as high as the third rib, and the lower lobe of the right lung was consolidated. The abscess contained nearly two pints of pus. The author remarks that, even had the purulent collection been tapped, it would still have been supposed to be an interpleural exudation, and in any event the correct diagnosis could be made only at the autopsy.

SIMULATED HÆMOPTYSIS AND HÆMATEMESIS.—Dr. S. Wallgren relates the case of a young girl, who was anæmic and complained of a cough and various pains, who pretended to have hemorrhages from the lungs and stomach. The alleged attacks always occurred at night, and it was found that the girl obtained the blood necessary for her deception by means of leeches.—*Upsala Läkareförenings Förhandlingar.*

TREATMENT OF GOUTY JOINTS.—To shorten an attack of acute gout, Dr. Rothe recommends repeated cold douches followed by an application of the following solution: Liquor plumbi acetat., 15 parts; spiritus vini, 25 parts; tr. opii ammoniat., 5 parts; aquæ font., 300 parts. Compresses wet with the solution are to be applied to the affected joint and covered with rubber tissue. The writer has seen great relief of pain follow this treatment in other patients as well as in his own person.—*Memorabilien*, No. 4, 1885.

REPRODUCTION OF THE TESTICLE.—Professor Luigi Griffini has been conducting a long series of experiments upon frogs to determine the question of the reproduction of the testicles after wounds and injuries to these organs. The following are his conclusions: 1. A partial reproduction of the testicle occurs in the frog. 2. The newly formed parenchyma is derived from that pre-existing. 3. The cells of the stroma do not take any part in the formation of new glandular tissue.—*Gazzetta degli Ospitali*, No. 68, 1885.

ULCERATIONS OF THE DIGESTIVE TRACT CAUSED BY MORPHINE.—Dr. Amadeo Sourrouille relates the case of a woman, suffering from cancer of the uterus, who could find no relief from her pain except by the use of morphine. She shrank from hypodermic injections and therefore took

the drug in pill form. The dose was gradually increased from three-fourths grain up to four grains. The pain was quieted, but the patient suffered from the usual effects of morphine upon the digestive and urinary tracts. Soon after, numerous ulcers, some superficial and others deep, were seen upon the mucous membrane of the mouth and pharynx. Suspecting that the morphine might be the cause of this trouble the author advised its discontinuance, and in a short time the ulcerations disappeared. A few weeks later the pain became so severe that it was necessary to resort again to the morphine, and almost immediately the ulcers reappeared in the mouth.—*El Sentido Católico en las Ciencias Médicas*, No. 32, 1885.

THERAPEUTIC USES OF CAPSICUM.—In an article on this subject in *La Crónica Médica de Lima*, No. 19, 1885, Dr. M. Ceballos Torses relates a number of cases of different affections in which the employment of red pepper was followed by excellent results. He found benefit from its use in chronic dysentery and hemorrhoids and in vomiting, especially in the vomiting of pregnancy. It was also given with happy effect in several cases of bilious fever peculiar to warm climates, the symptoms of which bear so close a resemblance to those of yellow fever.

JOINT AFFECTION COMPLICATING CONJUNCTIVITIS NEONATORUM.—Dr. Johan Widmark relates in *Hygiea*, No. 8, 1885, the case of an infant suffering from conjunctivitis, acquired probably from another baby lying in the same apartment. The disease was not very severe, but was rather obstinate in its persistence, and the secretion contained gonococci. On the sixteenth day of the disease the mother noticed that the infant did not move the right leg, and that the ankle on this side was swollen, red, and tender on pressure. The joint affection yielded readily to treatment and had entirely disappeared at the end of two weeks. Cases similar to this are very rarely reported, but if conjunctivitis neonatorum is a gonorrhœal affection, the occurrence of joint implication should not be very rare.

CASE OF GASTROTOMY WITH CANULE À DEMEURE.—Professor Sklifasowsky (*Revue de Médecine*, No. 2, 1885) performed gastrotomy on a woman, fifty-nine years of age, who had a stricture of the œsophagus, due to cancer. The patient died six months after the operation from generalization of the cancer. The case is described especially to show the employment of a permanent canula, which the operator adopted for the case. It was quite similar to the double canula commonly used in tracheotomy. The advantage of such a canula is that it can be left constantly in place. If desirable, it may be sealed hermetically. In the observation reported it was very well borne, and remained in place two or three weeks at a time without its removal being necessary. To feed the patient, the end of a stomach-pump tube was inserted into the canula and the nourishment introduced, after being subjected to the mastication and insalivation of the patient herself, who thus was permitted to enjoy the sense of taste.

PARTHENINE AS A FEBRIFUGE.—Dr. Tovar, a Cuban, has experimented with the parthenium hysterophorus, a plant which is much used by the country people of Cuba in the form of an infusion as a febrifuge. Physicians, as well, in the central districts of the island have employed it to advantage as an antiperiodic. Among the substances which the plant contains is parthenine. This appears in dark-colored scales, which color water yellow and give to it an aromatic taste. This substance the writer administered to eighty patients, in whom quinine was indicated. It produced a rapid diminution of the fever. The maximum dose was thirty grains.—*Cronica medico-quirurjica de la Habana.*

OSTEITIS OF THE CORACOID PROCESS.—Professor Poncet, of Lyons, read a paper on this subject before the French Association for the Advancement of Science at its last session in Grenoble. The disease, he says, occurs with greatest frequency in the period of adolescence, before the consolidation of the epiphyses, and is liable to be confounded with scapulalgia, osteitis of the head of the humerus, or even conical Pott's disease. The diagnosis may be made by the location of pain on pressure, and by the presence of tumefaction or of an abscess. The latter is found usually in the subclavicular region rather than in the scapuli-humeral, or on the internal aspect of the arm, the pus following the sheath of the coraco-brachial muscle, or of the short head of the biceps. The treatment consists in resection of the process by means of a T-shaped incision. In the case of tubercular osteitis, union by first intention cannot be hoped for, and it will be necessary to provide for free drainage.—*Bulletin Général de Thérapeutique*, September 15, 1885.

PERNICIOUS LYMPHODERMIA.—By this name Kaposi designates a new form of skin disease of which he has seen but one case. The patient, a woman, thirty-nine years old, had suffered for over a year from an affection of the skin, accompanied by itching and degeneration, which presented all the appearances of a chronic eczema. The skin was very pale, suggesting leucæmia, and there was a diffuse, doughy œdema of the subcutaneous connective-tissue, with thickening of the corium and epidermis of the face, neck, and superior thoracic region. Within a few weeks after the patient's admission to hospital several large nodules made their appearance in the subcutaneous tissue and corium. In the former region they were presented as localized infiltrations without well-defined outlines, but in the cutis they resembled ordinary eczematous furuncles. They were seen on the arms, face, breast, and clavicular region. Some of them opened spontaneously, discharging a creamy substance, and then cicatrized or became converted into flat ulcers. Fresh nodules appeared, the old ones increased in size, the spleen became greatly enlarged, the œdema spread gradually over the entire body, although the examination of the urine gave negative results, and the blood presented evidences of steadily progressive leucæmia, until finally, five months after admission to hospital, the woman died suddenly. At the autopsy lymphatic nodules were found in the lungs, as well as in the skin and subcutaneous tissues. The lymphatic glands were converted into fatty tumors, the spleen was four times the natural size, and its pulp was of a homogeneous pale-red color. The marrow of the small bones and of the extremities of the long bones was of a grayish color, but in the shafts of the bones it was very dark red.—*Centralblatt für Chirurgie*, September 12, 1885.

PROPERTIES OF THE QUILLAYA BARK.—The two glucosides which exist in Senega root and give to it its medicinal properties, are found, it appears, five times more abundant in the quillaya bark. This fact induced Dr. Kobert, of Strassburg, to substitute the latter bark for Senega in the treatment of diseases of the respiratory organs. Its action as an expectorant appears well established, and its administration provokes neither diarrhœa nor vomiting, and is much preferred by the patient. Children take it readily, on account of the sweetish taste of the decoction, which differs materially from that of Senega. Dr. Kobert advises its administration in decoction, made with five grammes of the bark to two hundred grammes of water. The dose for an adult is a dessert-spoonful every hour, and for a child a teaspoonful.—*Centralblatt für klin. Medicine.*

TREATMENT OF PULMONARY GANGRENE BY INHALATIONS OF CARBOLIC ACID.—M. Paul has employed this method in seven cases, in all of which a rapid and permanent cure was obtained without the appearance of any toxic symptoms. The solution employed was of the strength of one part in seven of water, and was enclosed in a flask, the patient inhaling the vapor. In addition to this, eucalyptus was employed internally in doses of one-half drachm of the alcoholate per diem.—*Bulletin Général de Thérapeutique*, September 15, 1885.

THE MEDICAL RECORD:

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THE PAY-PATIENT ABUSE.

PRACTICE always falls below theory in the working out of social problems. The pay-patient system existing in our hospitals is an illustration of this fact. We hear a great deal at the present time about the physician's duty to the community. Is it not time that we heard less about this and more about the community's duty toward the physician. It is a poor system of every-day ethics in which all the obligations are on one side and all the rewards on the other. If the physician and the community could be weighed against each other in the scale of ethical relations, which party, think you, would be found wanting. The physician is in every respect ready to sacrifice his time and talents for the public good. Is the public disposed to make on its part an equal sacrifice. Notoriously it is not. The entries under the head of "bills payable" in the ledger of any medical man speak more forcibly than can any words of ours. The men who minister to mere creature comforts—the grocer and the butcher—must be paid. Those who care for bodily ills, and by their skill replace disease with health can wait for their pay. A contemporary truly says, "The patient's gratitude to his doctor is part of his disease. It is most declared when the fever is highest, cools off during convalescence, and entirely disappears with the complete return of health." During the past few years the public here in New York seem to have been looking about for some new burden to lay upon the shoulders of the medical profession. They have found one in the pay-patient systems of our hospital wards, and more particularly private rooms.

This system is faulty not so much in itself as in the method of its application. A person of means who is living at a hotel or boarding-house is stricken with some serious illness. Careful attention is necessary. Supposing he is away from home, there is no one who cares particularly about him or for whom he particularly cares. The expense for attendance, nurses, medicines, etc., will amount to a considerable sum. Or again, his case may be of such a nature that he cannot well be cared for in a hotel or private house. Under these circumstances he bethinks himself of some reputable hospital whither he may go and be well looked after. This is right, we think, in every respect. He is acting in self-defence. He is honorably following the old rule of looking out for number one. Against such cases we do not inveigh. The hospital is the proper place for them.

But there are many who go to the hospital from no such motive. They may be taken sick in their own homes, but they choose to go to a hospital private room—not so much, perhaps, from motives of economy, as because they can be cared for with less trouble than at home. Even this would be no violation of social ethics, were the physicians at the hospital, attending and resident, allowed to receive any compensation for services rendered. They are debarred from any such compensation. The hospitals purport to be and glory in being places where the best of treatment is given free of charge; and then they go through the somewhat ostrich-like proceeding of making out bills to private patients for "board," as they are "not allowed to make any charge for medical attendance." Again, persons are received at the hospitals afflicted with chronic diseases, who are peevish and fretful, whose wails about indefinite aches and pains would exhaust the patience of a Job, who make life a burden to all with whom they are brought in contact. Their own families have finally become tired out with them. Instead of sending them to some sanatorium, where they would be vastly benefitted, they take them to a hospital. They know that the latter's regard for its own reputation will insure good care. The burden is shifted from their own shoulders to those of the hospital physicians. Is this an exaggerated picture? Let any one who has served in our large endowed institutions answer. Such patients often consider the necessary discipline of institutions irksome and overbearing. They forget that such discipline is at the bottom of the successful management of an aggregation of sick people.

These people are allowed to come into our hospital private rooms. For all the additional work imposed upon resident and attendant physicians the latter do not receive one cent. Nay, more, they are not allowed to. The fees which the patient would otherwise pay, are directed into the hospital treasury for "board," and the family physician is the loser. In a high moral sense such conduct is clearly an evasion of social obligations. Thus far we have spoken only of medical cases. Similar flagrancies are observed in the cases of surgical patients. A man able to pay for surgical attendance desires to be operated upon by a certain surgeon. Under present conditions he can go to the hospital, pay a moderate sum for a few weeks' board, and have the operation performed free by this same surgeon, who is not allowed to receive any compensation. Should the latter venture to remonstrate with the trustees of the institution because of this unfairness, he learns that others are ready to assume his duties should he find them irksome. The only remedy in the hands of the surgeon is to establish his own private hospital. Then from each one desiring his services can he receive a proper compensation. To reform this abuse we must go back to the trustees, who are not always able to discriminate between what are and what are not proper cases for admission. The charitable medical institutions were not devised for making money out of the profession. Such a procedure is a prostitution of their office and contrary to the spirit in which they were founded.

THE INOCULATION TREATMENT OF HYDROPHOBIA.

THE daily papers have devoted much space recently to exploiting M. Pasteur's alleged discovery of a cure for hydrophobia. After experimenting for a year longer Pasteur has finally come before the Academie des Sciences again, and announced that he has succeeded in perfecting a method of inoculation by which human beings can be safely rendered insusceptible to the virus of rabies, even after it has entered the system. We have referred to Pasteur's first discovery, made over a year ago, viz., that one attack of hydrophobia in dogs protected against a second, and that such a protective inoculation could be made safely on dogs with a modified virus. So much seemed definitely established.

Pasteur's present claim has a wider range. He believes that his inoculation system is now so perfected as to be rendered practicable for application to human beings, both for protection and cure.

Pasteur's process, by which he prepares his virus and his subjects, is a very complicated one, and reads more like the performance of a conjurer than the methods of a scientist. A bit of the spinal cord of a rabid dog is inoculated in a rabbit. After about fifteen days this rabbit dies of hydrophobia. A portion of its cord is then taken and inoculated in a second rabbit, which animal also dies of rabies, after a somewhat shorter period of incubation. The cord of the second rabbit is used for the inoculation of a third animal, and so on until sixty rabbits have been destroyed by the inoculated disease. With each successive inoculation the virus gets stronger, and the period of incubation shorter until the sixtieth rabbit dies on the seventh day. Bits of the cord from the whole series of sixty are preserved in bottles of dried air, which has the property of weakening the virus. Thus M. Pasteur obtains a series of specimens of spinal cord having a gradual steady variation in specific virulence, from the very weak to the very strong. He now takes a bitten dog or man and inoculates it or him, first with the weak virus, then with virus successively of stronger and stronger potency, until finally the strongest and freshest specimen is used. Protection is then believed to be conferred.

That this process succeeds with dogs has been admitted, but the claim that it will succeed with man still rests on a very flimsy foundation, as will be seen from the reports given of the only two cases in which it has been tried.

A boy, twelve years of age, named Meister, who had been bitten fourteen times, came from Alsace with his mother to see Dr. Pasteur. The autopsy of the dog which had bitten the boy left no doubt as to its having suffered from hydrophobia. In thirteen days inoculations were made upon Meister with pieces of spinal marrow containing virus of constantly increasing strength, the last being from the spine of a rabbit that had died only the day before. At the time of the report one hundred days had passed since Meister underwent the last inoculation, and the boy was in perfect health. He had been bitten sixty hours, and had travelled from Alsace to Paris before the first inoculation was performed.

A shepherd boy, named Judith, aged fifteen, was bitten by a mad dog and had been a week under treatment when Pasteur reported his case.

It is well known that all persons bitten by mad dogs do not get rabies, and the evidence for Pasteur's hydrophobia cure is as yet mainly one of analogy.

As we stated a year ago, Pasteur's view is that all dogs should receive preventive inoculations or be Pasteurized, and thereby the disease of hydrophobia be entirely eliminated from the race.

CAREFUL VACCINATING.

THERE is a manifest tendency for small-pox to disseminate itself from its present epidemic centre, Montreal, and we may expect to find it cropping out here and there in the United States during the coming season. Epidemics of this disease are liable to begin in the autumn, and increase in violence during the cold months, owing probably to the crowding together of people at this season.

There should therefore be no delay on the part of all unprotected persons in getting vaccinated.

And since so much is now being said about the dangers and accidents of vaccination it behooves physicians to use extra precautions in employing this protective measure.

The virus generally used by American physicians is the bovine. This should be fresh, and obtained from a responsible source. The arm, before its vaccination, should be carefully cleansed, and the instrument invariably and thoroughly disinfected. The operation of vaccinating should, in other words, be done antiseptically, and the arm should afterward be kept from all septic influences. Such precautions will lessen the per cent. of unpleasant accidents, and will give to the physician the satisfaction of feeling that he has done his whole duty in the matter.

A SERIOUS MISREPRESENTATION.

WE would call the attention of all fair-minded medical men to a persistent and graceless misrepresentation which is being made by the apologists of the present organizers of the Washington Medical Congress. It is announced by these gentlemen that the rules have been changed so as to allow all members of the regular medical profession to become members of the Congress. And it is repeatedly and with great show of liberality asserted that now all cause of complaint has been removed.

Gentlemen who write thus know very well that they tell a half truth. They know that not a physician in affiliation alone with the New York State Medical Society or county societies can hold an office in the Congress. They know very well that they have thus arbitrarily excluded some of our best and most honored physicians from all official part in the Congress, and yet we are informed, forsooth, that "now all possible cause of complaint is removed."

VACCINATION FOR WHOOPING-COUGH.

As long ago as 1828, Professor Chapman, of Philadelphia, recommended vaccination as a remedy for whooping-cough. The practice was purely empirical and on

its face a little absurd, nevertheless it has been kept up by physicians here and there, and now receives renewed advocacy in the *Cincinnati Lancet and Clinic.*

Dr. F. W. Entrikin, of Finlay, O., writes:

"I have vaccinated for this purpose several hundred children, and almost always with happy results, usually a speedy cure. During the many years I have been familiar with the practice I have seen no reason to discard it. I have frequently seen it recommended in medical journals."

He adds:

"I think it best to give the usual treatment until the febrile stage has passed, then vaccinate, the new disease set up by the virus will then usually arrest the nervous and other distressing symptoms."

Other contributors report favorable results from this apparently absurd method of treatment. No positive clinical evidence, however, is furnished.

CARBOLIC ACID IN INDIGESTION.

NEARLY all writers upon the subject of dyspepsia recommend the use of creasote or carbolic acid as a remedy for gastric fermentation and eructations. Several physicians have recently called attention to the almost specific value of this carbolic acid in conditions where the stomach appears to be hyperæsthetic as well as filled with the gases of decomposition.

Dr. Fenwick, some years ago, recommended glycerine and carbolic acid in these conditions. Mr. J. F. Dixon, in a letter to the *British Medical Journal*, says that a few years later he was tempted to follow Fenwick's method, and try carbolic acid in indigestion associated with tenderness of the stomach, acidity, and flatulence. "In most instances," he says, "the result was very striking; cases which had proved very intractable yielding immediately to its influence. I used it of the same strength which I have always used for the eye; that is, two minims to the ounce of water, usually with the addition of five grains of carbonate of sodium and twenty-five minims of aromatic spirit of ammonia."

Mr. Edward Berdoe adds, in the same journal, that he has found carbolic acid most useful in fermentative dyspepsia, accompanied by sour risings and eructations of gas, with pain after meals.

"The dose," he writes, "is from five to ten minims, in mint-water or other convenient vehicle. As it mixes well, I think it a more elegant and safe form than a solution of the acid in water only. When there is much pain in the stomach after food, I have found it useful to add five or six minims of the liquor opii sedativus to each dose; and, when there is want of tone in the seat of digestion, and bad appetite, five to ten minims of the tincture of nux vomica will often be found serviceable. I have found these remedies also very valuable, in the above combination, in cases of pyrosis, where, I think, the sedative influence of the carbolic acid on the mucous membrane is far more useful than the bismuth one usually given in such cases."

Dr. Yandell says editorially in the *American Practitioner:* "Carbolic acid has for many years been much used by the physicians of Louisville in indigestions of one kind and another, and may be fairly said to have secured a permanent place among the remedies for this class of troubles. The late Professor Lewis Rogers, of this city, first gave it in a painful condition of the stomach, accompanied by eructations, in a woman convalescing from typhoid fever. The result was so satisfactory that he directed it in other cases, spoke of it in our medical societies, and led to its being very generally adopted by the profession here. In hyperæsthetic pyrosis it is particularly valuable; and in the fermentative diarrhœas, especially those accompanied by excessively offensive dejections, either in adults or children, it is efficacious beyond most drugs."

Altogether there is evidence that carbolic acid, by virtue of its two-fold powers of disinfectant and sedative, should play an important part in the therapeutics of dyspepsia.

AN OMINOUS SILENCE.

IT appears very pertinent to ask whether the American medical profession has any rights at all in connection with the proposed Medical Congress. Is it not time that the proceedings of the secret meeting in this city be published? Is it not time to inform the profession who is to officer the Congress, that is, or perhaps is not, to be. Who is to supply the places of Professor Dalton in Physiology, of Dr. Shakespeare in Pathology, of Dr. Battey in Gynecology. What gentlemen have stepped into the places vacated by Professor Bowditch, and Dr. Campbell? It is not unreasonable, we think, to ask who is the unknown assistant to the Assistant Secretary-General, or who are the other officers of sections nominated to fill the one hundred and sixty odd vacancies.

It is now two months since the secret conference was held in New York. The profession still knows almost nothing of what it has done or proposes to do, except that its action has caused some of the best of the few representative men then appointed to resign. It is time to hear something besides long-drawn-out explanations and reiterated assurances that matters are progressing satisfactorily. The silence is ominous. It indicates surely that the reputable men of the profession are continually refusing to work with a clique that is selfishly determined to carry out its own views.

A REVIEW OF RECENT CONTRIBUTIONS TO THE THERAPEUTICS OF OBESITY.

THE Americans, as a race, are not inclined to obesity. All the more, perhaps, do they dislike it when it comes. Anti-fat remedies, therefore, generally take very well with the laity, when properly advertised, while physicians are naturally always interested in scientific contributions to the therapeutics of obesity. Of late years there have been several of these, and recently Dr. Munk has presented a critical review of them. In addition we observe that, at a late meeting of the Académie de Médicine, Professor G. Sée presented his views upon the subject.

Dr. Munk, quoted in the London *Medical Record*, says Chambers, in 1850, excluded fat from the food, together with the greater part of the carbohydrates, and he was also the first to limit the supply of liquids. Dancel, in 1863, recommended plenty of albumen, a fair quantity of carbohydrates, and an allowance of between five hundred and twelve hundred and fifty grammes of liquid

Banting's diet (the name of his medical adviser, Mr. Harvey, should not be forgotten, and in Germany this method of reducing obesity is called the "Harvey-Banting" method) was almost purely albuminous. The proximate elements taken daily amounted to 170 grammes of dry albumen, 10 grammes of fat, and 80 grammes of carbohydrates. Banting reduced his weight by thirty-five pounds in nine months by this diet, and his girth by twelve and one-fourth English inches. The Banting diet deserves a closer examination. Fat exerts a protective influence over albumen; the greater the fat-supply, and also the fatter the body, the less is the destruction of albumen. In this diet no fat, and very little carbohydrates, is supplied, but plenty of albumen, which therefore partly undergoes destruction, and is partly deposited in the body, while the fat of the body is absorbed and reduced. The patient's condition improves in every way.

But the case alters as the body-fat lessens. With a higher albumen-condition and a lower fat-condition of the body, the conversion of albumen is greater, and more and more albumen is required in the food. Otherwise there is both fat-loss and albumen-loss, and when the latter occurs the patients feel very weak. Hence, the Banting *régime* is only suitable for the first few weeks, and both fat and carbohydrates should then be given, so as to restrict the albumen-changes in the body. As regards the protection of albumen, fat and carbohydrates are of about equal value; but, as regards the production of heat and the evolution of force, 1 part of fat = 2.4 parts of carbohydrates. The above diet, then, too rigidly carried out, soon makes the patients (or, at least, most of them) weak and wretched and sleepless; and very often dyspepsia arises, or gastro-intestinal catarrh, from failure to digest the albumen supplied.

Ebstein, therefore, arranged a different diet, in which there was more fat and less meat, and still less carbohydrates than in the Banting diet. This diet represents 100 grammes of dry albumen, 85 grammes of fat, and 50 grammes of carbohydrates, with about 1,750 grammes of liquid, and is far more non-nitrogenous than Banting's, and consequently there is less destruction of albumen in the body. Fat allays hunger sooner than other foods, and also the addition of fat to the food gives more variety.

The advantages of Ebstein's diet have been much vaunted, and his treatise, put in a popular form, has been widely disseminated. We have already pointed out that his views, as to the relation of fat-deposition to fatty food, had not a sound physiological basis, an opinion which has been corroborated by Voit. Moreover, Professor Oertel declares that Ebstein's diet is quite as likely to cause disgust as Banting's. It contains too much fat for the palate, and too little albumen for the tissues. This will be seen by the following table:

	Albumen.	Carbohydrates.	Fat.
Normal diet for a healthy adult..	130 grms.	360 grms.	90 grms.
Dr. Ebstein's diet.....	100 "	50 "	85 "
In the Harvey-Banting diet.....	170 "	80 "	10 "

It can be said in favor of Ebstein's diet, however, that it acts more slowly than Banting's, and, further, that its adoption is not recommended as being a specific and sudden cure, but as being a *régime* that must be followed for a long period of time.

Oertel's method of reducing obesity appears to be one that is gaining in popularity. If we mistake not, it was a *régime* stolen from Oertel that Schweininger applied successfully in the treatment of Bismarck. This author gives a fair amount of fats and carbohydrates, advises mountain-climbing as a cardiac gymnastic exercise, employs vapor-baths, prescribes pilocarpin, and enjoins a strict restriction of liquids.

Professor Sée reduces the hydrocarbons in the food to a minimum. He does not limit the amount of liquids drank (a fatal error in his *régime*). He imposes muscular exercise, warm baths, and small doses of potassium iodide. To tell the truth, his contribution to the therapeutics of obesity is not of great value, and in his special attention to the heart he appears to be only following the lines in which Oertel and others have worked.

News of the Week.

NEW YORK PHYSICIANS' MUTUAL AID ASSOCIATION.—The annual meeting of the New York Physicians' Mutual Aid Association will be held in the hall of the New York Academy of Medicine, No. 12 West Thirty-first Street, on Thursday, November 12, 1885, at 4 P.M. A revision of the by-laws will be proposed by the board of trustees. A full attendance is requested.

DR. C. E. NELSON has resigned as associate editor of the *Eastern Medical Journal.*

REPORT OF THE SURGEON-GENERAL.—General Murray, the Surgeon-General, in his annual report, submits estimates for the year ending June 30, 1887, amounting to $250,000. He says that provision should be made for emergencies, in view of the probability of an invasion of this country by cholera before the close of the ensuing fiscal year. Congress should make provision to enable this department to adopt every means to prevent the spread of this disease in the army. The general health of the army has been good.

SMALL-POX IN MONTREAL.—The small-pox shows no marked signs of abatement in Montreal, while it is slowly but surely disseminating itself throughout the Province. The local sanitary organization in the small towns is very imperfect and inefficient. In Montreal the disease has already caused the death, it is estimated, of over three thousand persons. The health authorities there have now become thoroughly aroused. They have obtained legal authority to isolate cases, and are trying their best to enforce vaccination. Still further, according to the daily press, the Health Board has unanimously declared that the public welfare demands the closing of the churches. This, if true, is a measure of very doubtful wisdom, considering the already strained relations between the health authorities and the people. A recent telegram from Montreal states that "The Vigilance Committee report that there are ten hundred and eighty-seven infected houses in the city which have not even been visited by the Health Officers. There are on an average two cases in each house. The contractors for the construction of the new Protestant hospital have struck work and nothing is being done. The Civic Board have been asked to erect a new hospital with fifteen hundred beds.

TRADING IN CLINICAL MATERIAL.—Complaints are made that some of the gentlemen connected with the out-door department of the New York Hospital send their clinical material to other institutions.

SMALL-POX IN THE UNITED STATES.—Small-pox is reported in Lowell, Mass., and St. Paul, Minn.

THE COUNTY INSANE ASYLUM AT CHICAGO, ILL., has long been a disgrace to its managers, to the people who support it, and to the doctors who have been connected with it. If the medical profession in Chicago is not a completely impotent body, it should demand and insist upon radical reforms. Periodically we read some fresh stories in the daily press about this notorious asylum. The latest is as follows: Dr. Harriet Alexander tells a committee investigating the County Insane Asylum a horrible story of the treatment and surroundings of inmates of the asylum, when she was there last Spring. Three hundred patients are crowded into a space only large enough for half that number, two persons often being compelled to sleep on one cot. The bed-clothing in February last consisted of one sheet and one blanket. There were not dresses enough to go around, and some of the women patients could not go out, etc. As a result of these disclosures a memorial to the Governor is being prepared, asking him to direct the State Board of Charities to investigate the asylum.

THE PRODUCTION OF ABORTIONS.—In one week the dredge-nets of the Associated Press have circulated the news that three doctors, living respectively in Springfield, Mass., Chicago, Ill., and Madison, Wis., have gotten in trouble by producing abortions to conceal the results of adultery. We wish that our professional newsgatherers had less fondness for carrion, and more conscientiousness in describing the untoothsome morsels when found. It makes the story a better one to say that the doctor was previously "in high standing and large practice." The truth generally is that the doctor had neither standing nor reputable practice, and perhaps had no right to a medical title whatever. All the same, it does the profession injury to have such stories constantly reported and such deeds credited to regular physicians.

THE NEW BUILDING OF THE MCGILL UNIVERSITY MEDICAL COLLEGE.—It is a pleasure to learn that medical colleges like that of McGill University, which have consistently devoted themselves to higher education, are prospering. The recent accession of a new building, finely equipped with laboratories, lecture-halls, museum, anatomical rooms, etc., marks an era in the history of the College.

UTILIZATION OF CRIMINALS FOR CHOLERA EXPERIMENTS.—Surgeon-General Cornish, in the *Indian Medical Gazette*, urges the propriety of using condemned criminals for the purpose of testing certain mooted points in the pathology of cholera. Why not use Ward?

RESIGNATION FROM THE CONGRESS.—Professor John G. Curtis, of this city, states that on August 31st he addressed a letter declining to have anything to do with the Congress under its present organization.

GERMAN OPINION OF THE WASHINGTON CONGRESS.—The *Centralblatt für Augenheilkunde* says that the success of the International Congress is unfortunately in doubt. "The American Medical Association has deposed the executive committee and sought to substitute another. We hope that this difficulty among the American doctors will soon be settled peaceably. The ophthalmologists of Europe would hardly feel inclined to attend a Congress with Agnew, Knapp, and others left out."

ECONOMIZING IN THE CITY HEALTH DEPARTMENT.—The Board of Estimate and Apportionment cut down the estimates of the Health Department from $487,516 to $345,500. A great part of the reduction was in the matter of salaries, for which $221,000 was asked and $150,000 allowed.

A NEW DISEASE, which has been termed electric cholera, has made its appearance in Spain. A few weeks ago a violent thunderstorm passed over the town of Ecija, in the province of Seville, and two hours after it had ceased upward of three thousand persons were attacked by diarrhœa and vomiting, and all the symptoms of cholera. Two thousand more were attacked the day after. All these persons were completely prostrated for twenty-four hours, but recovered without any deaths occurring among them.

THE TIME OF DAY WHEN BABIES ARE BORN.—A distinguished obstetrical professor seems destined to be shorn of one of his best annual lecture jokes, viz.: "Babies," he used to say, "are generally born at night, because their time is up!" The rude hand of the statistical investigator dispels this bit of facetiousness. Dr. Leaman, of Philadelphia, in an analysis of six hundred cases published in the *Medical Times*, finds that three hundred and nineteen were born between the hours of 6 A.M. and 6 P.M. The greatest number occurring during one hour, forty, was between 7 and 8 A.M. The least number, twelve, occurred between 12 M. and 1 P.M. Dr. A. W. Hamilton also combats, in the *Indiana Medical Journal*, the general belief that the majority of births occur during the night. He has kept a record on this matter, and finds that quite as many children are born during daylight as during the night.

ANOTHER MEDICAL COLLEGE IN DETROIT.—Evidently the *cacoëthes docendi* is upon the profession this fall. The *Medical Age* says: "There are rumors of another Medical College in Detroit, in the near future, and this in spite of the arguments which were employed to effect the amalgamation of the two schools which existed last year into the one which holds the boards this season."

NEW YORK STATE MEDICAL ASSOCIATION.—The second annual meeting of this Association will be held in the Murray Hill Hotel, New York City, on November 17th, 18th, and 19th, and at the Carnegie Laboratory on the 20th, 1885.

NOTIFICATION OF INFECTIOUS DISEASES.—If one may credit the City Board of Health Reports, there were hardly any fatal cases of the acute infectious fevers in this city, except typhoid, during the month of September last. We fear, however, that there is a very great laxity on the part of physicians in the matter of reporting these cases. And there always will be imperfect reports so long as the doctor is compelled by the State to do a service for which he receives no return.

NEW YORK POLYCLINIC.—Dr. B. Sachs has been appointed Instructor in Diseases of the Mind and Nervous System.

WASHINGTON OBSTETRICAL AND GYNECOLOGICAL SOCIETY.—At the annual meeting of the Washington Obstetrical and Gynecological Society, held on October 16, 1885, the following officers were elected for the ensuing year: Dr. A. F. A. King, President; Drs. W. W. Johnston and J. Taber Johnson, Vice-Presidents; Dr. C. H. A. Kleinschmidt, Recording Secretary; Dr. S. S. Adams, Corresponding Secretary; Dr. G. B. Harrison, Treasurer.

AN ACCOUNT, BY A MEMBER, OF THE METHODS OF THE SECRET COMMITTEE ON THE WASHINGTON CONGRESS.—Dr. R. A. Kinloch, a member (now resigned) of the committee in question, in a letter to the *Medical News*, gives a striking picture of the doubtful and disingenuous methods employed by the committee at its secret meeting, held in New York September 3d. From an extract which we give below it will be seen that there is and has been no resolution of the American Medical Association forbidding the appointment of New Code or no Code men to office, and that the present position of the committee was the result of the personal prejudices of certain members of the committee. Dr. Kinloch writes: "The next matter which duty to myself compels me to notice has reference to the alteration of the rule, as adopted at Chicago, determining the American membership of the Congress. This rule had been fixed, as was claimed, *in obedience to the voice of the American Medical Association*, so as to restrict the membership on ethical grounds. The determination of a few adroit members of the committee was now to undo what had been done, and in their own peculiar way. By management more suitable for a political than a professional or scientific body, and which I will not now comment upon, the rule, as prepared for presentation to the committee, which it was claimed opened the Congress to all members of the regular profession, was finally brought before the body. I asked the gentleman who had introduced the subject whether, under the proposed rule, all members of the Congress would be alike eligible to office, and whether he would favor the election of any member of the profession simply upon his merits, or whether there was not a mental reservation upon the part of those suggesting the change by which, upon ethical grounds, certain members would be members merely, and debarred from holding office. The answer came, that, in accordance with the 'resolution' of the American Medical Association, certain parties must be refused high position. I asked for the reading of the 'resolution' referred to. I wanted to know whether the Association had ever drawn any such fine distinction, opening the membership to all, but restricting the distribution of honors. It turned out that there was no such resolution ever adopted by the Association. I then maintained that if the Association and its implied sentiment were to guide the committee upon this occasion, it was more consistent to hold on to the Chicago rule than to accept the amendment as now proposed. I offered to support the amendment with all my heart if this was honestly offered, and if the mover would amend it further by stating that all members were equally eligible to office, or if he would agree to show that, practically, all were eligible by voting for men on their merit and regardless of ethical standing. If this were declined, I insisted I could not vote for the amendment, for I would not pretend to offer bread and give a stone. My proposition was not accepted, but the new rule was adopted without my vote, and *all in the name of the Association.*" No more damning evidence against the policy of the present organizing committee could be possibly furnished than the foregoing, coming, as it does, from a courteous and conservative gentleman, a leader in the medical profession of the South.

Reviews and Notices.

A SYSTEM OF PRACTICAL MEDICINE BY AMERICAN AUTHORS. Edited by WILLIAM PEPPER, M.D., LL.D., assisted by LOUIS STARR, M.D. Volume I.: Pathology and General Diseases. Philadelphia: Lea Brothers & Co.

THE editor tells us in his preface that he feels that the time has come for the presentation of the whole field of medicine as it is actually taught and practised by American physicians. We quite agree that an extensive and systematic treatise by American physicians is a good thing, both for publishers and physicians. Race, temperament, and climatic conditions give, undoubtedly, a peculiar physiognomy to many diseases, and develop special modes of dietetic and medicinal treatment. We welcome the appearance of an "American System of Medicine" therefore. But in the first volume there is very little distinctly American. European authors are much the most frequently quoted, and in articles such as that on "Epidemic Cerebro-spinal Meningitis," in which some deficiencies in pathological description may be noted, it is because foreign authors have not been thoroughly studied. In fact, there is not enough material in American medical literature or experience with which to build a system or even to stamp a system with any striking peculiarity. This is not saying that the present work is not a most thorough, satisfactory, and creditable one. Only it is largely and necessarily the same old subjects gone over again, the same clinical descriptions, the pathology a little more advanced, the treatment perhaps more rational and definite.

The first volume starts out with certain general discussions. Nearly a hundred pages are devoted to "General Morbid Processes," written by Dr. Reginald H. Fitz. Dr. Fitz is a sound pathologist, and well acquainted with the present status of this department of medical science. He gives a useful and correct *résumé*, although it is pretty dry reading, as most general discussions are.

Dr. Hartshorne has the difficult task of saying things in general regarding etiology, medical diagnosis, and prognosis. He has done as well as could be done with these subjects in fifty pages; but we think that they add little to the value of the treatise and are largely a sacrifice of the reader and publisher to the fetich of "The Systematic."

Dr. Billings' article on "Hygiene" is one of the most useful in the book. If we were adopting the arts of the auctioneer, we should say that it alone was worth the price of the treatise, as a chapter for reference and instruction to the general practitioner.

The remainder and larger part of the volume is devoted, under the term "General Diseases," to the acute infectious fevers.

The contributors here embrace a number of distinguished names, with some not so distinguished, a rather large proportion (of the former) being Philadelphia physicians. In general the articles show the marks of care and

industry. In many cases, as in the accounts of typhoid fever and cerebro-spinal meningitis, new facts or statistics are presented. We shall not venture to criticise the different articles separately. The only fault which can be detected is that the authors have in many cases ambitiously crammed in too much. Such endless numbers of references to what this or that German thinks of a disease's pathology or treatment tend to confuse, and many of these quoted opinions are quite worthless. We would not be thought hypercritical, however, and would state again that the discussions are, on the whole, thorough, systematic, and quite up to the latest advances in medical pathology.

THE PRINCIPLES AND PRACTICE OF SURGERY. By JOHN ASHHURST, JR., M.D., Professor of Clinical Surgery in the University of Pennsylvania, Senior Surgeon to the Children's Hospital, Consulting Surgeon to the Woman's Hospital, etc. Fourth Edition, Enlarged and thoroughly Revised. 8vo, pp. 1118. Philadelphia: Lea Brothers & Co. 1885.

THIS thoroughly practical work has now advanced to the fourth edition. A large amount of valuable matter has been added, necessitating an increase of fifty pages. It has now fairly earned for itself the reputation of a standard work on surgery, and is abundantly able to stand on its own merits. The author is a surgeon of large experience and a scholar of rare attainments, and as such he has infused a personality into his work which cannot fail to be appreciated by the student in quest of broad principles, or the surgeon who wishes to be guided by a master.

A PRACTICAL TREATMENT ON THE DISEASES OF CHILDREN. By ALFRED VOGEL, M.D., Professor of Clinical Medicine in the University of Dorpat, Russia. Translated and edited by H. RAPHAEL, M.D., formerly House Surgeon to Bellevue Hospital, etc. Third American from the eighth German edition, revised and enlarged. 8vo, pp. 640. New York: D. Appleton & Co. 1885.

THIS work has already made for itself a well-deserved reputation. It is concise, scientific, and practical in character. The author has had a large experience, and he makes logical and positive statements. The treatise has advanced to its eighth German and its third American edition. This fact, of course, speaks for itself. All that perhaps remains to be said is that the book still keeps abreast of the times in pathology and therapeutics. This would go without the saying, but the proof in the affirmative is apparent in every chapter. In the present edition much has been added to the chapters on artificial nutrition, dentition, and nervous diseases. The important subject of possible transmission of tuberculosis from the cow to the child has been very succinctly and critically discussed.

The various new remedies have been very fully detailed, and their employment in infantile diseases fully discussed. Dr. Raphael has added a very interesting and instructive article on cerebro-spinal meningitis. The volume has not been perceptibly enlarged.

FOWNES' MANUAL OF CHEMISTRY, THEORETICAL AND PRACTICAL. A new American from the twelfth English edition, embodying Watt's Physical and Inorganic Chemistry, with one hundred and sixty-eight illustrations. 12mo, pp. 1056. Philadelphia.

THIS chemistry has maintained its reputation as a leading text-book for students for over thirty years. In the meantime its author and editor have passed away. The former has been dead for many years; the latter, while contemplating a new work founded on Fownes' plan, died recently, with only a portion of his task completed. Prof. Watt's work was rendered necessary by the constantly increasing number of additions and corrections in successive editions under his supervision. It became in time more representative of the editor's than of the author's views. Hence it has been deemed best to comprise the work of both author and editor in a consistent form in one volume. As such it bids fair to continue its former popularity with students of chemistry.

A TREATISE ON NERVOUS DISEASES, THEIR SYMPTOMS AND TREATMENT. A Text-book for Students and Practitioners. By SAMUEL G. WEBBER, M.D. Pp. 415. New York: D. Appleton & Co. 1885.

IN such a work as Dr. Webber's, which lays no claim to originality, the reviewer can only commend the arrangement, the conciseness of statement, the perspicuity of style, and the judgment displayed. At the first glance one is led to question the desirability of adding another to the long list of books on nervous diseases which have already been published, but each year so much increases the knowledge of this department of medicine that the latest comer has the advantage and commends itself to the student as being up to date.

THE ESSENTIALS OF HISTOLOGY. For the Use of Students. By E. A. SCHÄFER, F.R.S., Jodrell Professor of Physiology in University College, London; Editor of the Histological portion of Quain's Anatomy. Philadelphia: Lea Brothers & Co. 1885.

THIS book is divided into forty-two lessons, as well arranged for use by students as any with which the reviewer is acquainted. The text is both well written and well illustrated. It is very evident, however, that the author did not intend to interfere with the sale of his "Course of Practical Histology" by writing this volume; but he has materially interfered with the success of the student in studying "The Essentials of Histology" by rendering it necessary to refer to another book for many of the practical details of his work. It will serve a good purpose as an elementary text-book of histology.

DE L'APHASIE ET SES DIVERSES FORMES. Par LE DR. BERNARD. Paris: Aux Bureaux du Progrès Médical. 1884. 8vo, pp. 271. Paper. Publications du Progrès Médical.

IN a recent editorial on the "New Divisions of Aphasia," in THE MEDICAL RECORD, much of that discussed by Dr. Bernard in the present volume was given. Our author has written an exhaustive memoir on the subject of aphasia, which will be of standing value for perusal and reference.

A TEXT-BOOK OF NURSING, FOR THE USE OF TRAINING SCHOOLS, FAMILIES, AND PRIVATE STUDENTS. Compiled by CLARA S. WEEKS, Graduate of the New York Hospital Training School; Superintendent of the Training School for Nurses, Paterson, N. J. 12mo, pp. 396. New York: D. Appleton & Co. 1885.

THIS is an admirably written book, and is full of those important practical details necessary for the medical and surgical nurse. In fact it could be read with profit by every medical student and young practitioner.

THE SANITARY CONDITION OF THE PROVINCE OF MILAN.—A commission, recently appointed by the prefect of Milan, to investigate the subject of pellagra, has made a long report upon the sanitary condition of the province, from which it would appear that there is considerable room for improvement in this direction. The report is presented in fifteen chapters, dealing with dwellings, water-supply, bread, schools, prevalent diseases, etc., and it has hardly a single word to say in praise, but many in condemnation. There is but little abuse of alcohol, and syphilis is prevalent only among young men who have returned from military service; but the people live in dirt and squalor, without the slightest regard for the most elementary rules of hygiene.

THE NUMBER OF MEDICAL STUDENTS IN THIS CITY is larger than ever before.

Reports of Societies.

THE AMERICAN ACADEMY OF MEDICINE.

Ninth Annual Session, held in New York City, October 28 and 29, 1885.

FIRST DAY, WEDNESDAY, OCTOBER 28TH—MORNING SESSION.

THE meeting was called to order by the President, ALBERT H. GIHON, A.M., M.D., of Washington.

Prayer was offered by REV. HENRY J. VANDYKE, JR., of New York.

The following gentlemen were elected Fellows of the Academy: Drs. S. M. Nelson, of Cambridge, Mass.; J. H. W. Chestnut, of Philadelphia, Pa.; Rufus W. Bishop, of Chicago, Ill.; E. E. Mariott, of Springfield, Mass.; George N. Acker, of Washington, D. C.; H. V. Logan, of Scranton, Pa.; H. W. Elmer, of Bridgeton, N. J.; H. F. Hansell, of Philadelphia, Pa.; E. W. Cushing, of Boston, Mass.; J. S. Wight, of Brooklyn, N. Y.; William Osgood, of North Yarmouth, Me.; C. A. Packard, of Bath, Me.; W. K. Oake, of Auburn, Me.; A. Mitchel, of Brunswick, Me.; D. A. Robinson, of Bangor, Me.; C. A. King, of Portland, Me.; J. A. Spaulding, of Portland, Me.; G. W. Marshall, of Milford, Del.; William A. Hugie, of Charleston, S. C.; J. B. Shapley, of St. Louis, Mo.; M. H. Post, of St. Louis, Mo.; C. E. Briggs, of St. Louis, Mo.; J. S. Alleymen, of St. Louis, Mo.; N. S. Davis, Jr., of Chicago, Ill.; and Charles Edgar Cook, of Illinois. Dr. Henry H. Smith, and Dr. S. Weir Mitchell, of Philadelphia, were elected to honorary membership.

The first paper was read by DR. ROBERT L. SIBBETT, of Carlisle, Pa., and was entitled "The Study of Medicine as a Means of Education."

DR. CHARLES MCINTYRE, of Easton, Pa., then read a paper on

MEDICAL SUPERVISION IN STUDENT LIFE.

This paper assumed that the times had changed; that modern life made a greater demand upon the time and energies of the individual to the detriment of his health and development. It was considered impossible to diminish tasks and give more time to rest and recreation. There is no way known to shorten the period of rest, so something should be done for recreation. The plan suggested was the usual one given by students on these subjects. A careful physical examination at the beginning of school life, and a series of graded bodily exercises under medical supervision throughout school life was recommended. The end aimed at is to give such tasks as will tend to strengthen the weaker parts.

DR. HENRY O. MARCY, of Boston, Mass., read a paper on

THE CLIMATIC TREATMENT OF DISEASE, WITH AN ILLUSTRATION OF WESTERN NORTH CAROLINA AS A HEALTH-RESORT.

The fundamental factors of the zymotic diseases were first reviewed from our present knowledge of the rôle of the bacteria, and the question of the wise adaptability of the individual to his surroundings was considered as the best definition of climate. A *résumé* of the latest investigations of climatologists was given with reference to, and the results obtained by, the mountain health-resorts of Europe and America. The deductions of the writer were that good must be looked for in the benefit to be obtained to the individual in the improvement of his resisting vital powers, and invigoration of his cellular tissue regeneration, rather than in the escape from his bacterial enemies. The larger portion of the paper was devoted to the consideration of this new and important phase of the question of climate.

The higher Alleghanies in Western North Carolina were described at considerable length, as offering mountain health-resorts of a character well suited to a variety of diseases. The deductions were based on a long tour of personal investigation made during the last summer as a sanitary study.

The meeting then adjourned.

EVENING SESSION.

The meeting was called to order at eight o'clock. The President, DR. ALBERT L. GIHON, A.M., M.D., read his annual address entitled

WHAT IS MEDICINE?

He said that the place of the Academy was not to be sought among the pathological, clinical, sanitary, and other national associations. It antagonizes none of these, but seeks to cement all into a compact unity.

Referring to the slow growth of the Academy, it was stated that one of the reasons was to be found in the fundamental condition of membership, restricting fellowships to graduates in medicine who have received degrees in letters by course. As the co-operation of every educated man interested in the objects of the Academy is desirable, he was of the opinion that the time had come when every limitation to fellowship should be removed, except the solitary requirement that the candidate shall be in fact, as in title, "learned in medicine," and in all else that this term implies, but he would make it impossible for any one unfit or unworthy to enter though he come with an armful of diplomas, has subscribed to the most inflexible of codes, and no matter what faculty, society, or institution he may be delegated to represent. The nominations should be accompanied with the fullest record evidence, and be made long enough to advance, from six to twelve months, to enable the council to determine each man's fitness.

Let us ask ourselves the question, "What is medicine?" If we look to this Academy for the answer, we shall find that it is the most profound and ennobling study that can engage the intellect of man. This is not the popular idea. Like other professions whose offices are called for by the disagreeable incidents of humanity, it is only tolerated as a necessity. Sham aristocrats look down upon it, others hire its members as they do their cook and cabman. In military and naval services they are sought to be degraded. The ministering to the suffering and afflicted is nowhere regarded as an outcome of the study of the stupendous and sublime mysteries of existence. In the national councils, in military and naval organizations, in civil administration, who thinks of giving a first place to the physician, although his are the mental attainments which fit him best for counsel in all that concerns the welfare and progress of the human race?

The science of medicine involves the knowledge of everything that relates, however remotely, to the existence of man, his place in nature, his origin, growth, and development, preservation and continuance. The prevention and cure of those abnormal conditions which tend to his destruction are but one chapter in the volume, which, coming near the end, cannot be read understandingly without the thorough comprehension and diligent study of all that precedes. Medicine is so far-reaching in its sources, and so connected with every other branch of knowledge, that he who would begin its study must first have drunk deep of the well-spring of human knowledge. Medicine is a science of such proportions that only a well-educated man can master it. This is not the view entertained by the profession at large.

Why should medicine be cheapened to every purchaser, and the college debase its teachings to their limited understanding?

What can medicine only be to the ignorant numbers who are annually mustered into the ranks of the profession? To these men it can have no other aspect than that of a trade. Many enter upon it as a money-making vocation. It was taught them as a source of pecuniary profit, and they practise it for the fees they

get. Manifestly, then, medicine is not the same to all men, even medical men. If improper men can be excluded from national service, why not from State, county, and city medical societies? This should be done for the protection of the community. Where a drug-clerk kills one victim by his carelessness, he saves a hundred by recognizing errors in physicians' prescriptions. [Examples from apothecaries' files were given.]

Preventive medicine has at last attained recognition as the highest aim of the physician's art. It establishes new relations of the physician to the social system. Preventive medicine has more to do than warding off epidemic visitations of great scourges. Its most important duty is to consider the impairment of health of growing children through the sanitary defects of our school system, the prevention of insanity, the repression of crime. It is too much to expect antidotes for every microscopic germ. The tiny swarms around us are at once friends and foes. If we do not antagonize them, they purify the air we breathe, the water we drink, the dirt we tread, and prey upon our natural waste; it is only our own folly that causes them to turn and rend us.

Reform in medical education has been hampered by adherence to existing methods. It will not do merely to establish adjunct chairs. The starting-point must be the requirements of a thorough preliminary education. Four annual terms are necessary. Descriptive anatomy and materia medica are enough for the first year; histology and practical microscopy, physiology in all its relations, and the mechanical processes of pharmacy should occupy the second year; hygiene, general pathology, and general therapeutics for the third year; special pathology, special therapeutics, the philosophy of medicine, medical history jurisprudence, and ethics for the fourth year. A fifth year may, with advantage, be devoted to clinical experience under supervision.

Is our estimate of medicine visionary, and have we sought the impracticable? Must we silence our voices because few care to hear, and cease our efforts because the task is difficult? Must we tread the beaten track, lest we offend prejudices, antagonize pecuniary interests, and upset established orders? Not on this account shall we hesitate, if the truth be with us. The ethics of medicine rightly denounce fraternity with charlatans and quacks. Is the dishonor less if we degrade a noble profession by admitting to its rights and honors those who are ignorant, illiterate, and incompetent?

SECOND DAY—THURSDAY, OCTOBER 29TH—MORNING SESSION.

The meeting was called to order at ten o'clock.

A resolution expressing the sympathy of the Academy with Dr. H. P. Farnham in his painful illness, was offered by Dr. H. O. Marcy and adopted.

The following resolution was adopted:

Resolved, That a committee of three be appointed by the President to report at the next annual meeting, instructed to prepare a statement of the best preliminary education for medical students, and also a statement of the minimum attainments which medical schools should require of students before admitting them to the study of medicine.

It was also resolved to appoint a committee of two, whose duty it shall be to report the requirements for a preliminary education of the various medical colleges in the United States and in Canada.

The following officers were elected for the ensuing year: *President*, Dr. R. Stansbury Sutton, Pittsburg, Pa.; *Vice-Presidents*, Drs. Lewis P. Bush, Del., S. J. Jones, Ill., R. L. Sibbet, Pa., and F. H. Gerish, Me.; *Secretary and Treasurer*, Dr. R. J. Dunglison, Philadelphia, Pa.; *Assistant Secretary*, Dr. Charles McIntire, Jr., Easton, Pa.

Pittsburg was selected as the next place of meeting, on the third Tuesday in September, 1886.

A paper on "Medical Evidence," by T. J. Turner, M.D., in the absence of the author, was read by the Assistant Secretary.

REPORT ON LAWS REGULATING THE PRACTICE OF MEDICINE IN THE UNITED STATES AND CANADA,

by Richard J. Dunglison, M.D., of Philadelphia, Pa., and Henry C. Marcy, M.D., of Boston, Mass., was read by DR. R. J. DUNGLISON.

The doctor said that so little change has taken place within the last twelve months, with reference to legislative restriction of the practice of medicine, that your committee might in a few brief sentences dismiss the subject with the statement of the actual work accomplished in this direction. The honest efforts of medical men and of others during the past year, to accomplish creditable results in the States for the suppression of quackery, have been unabating, but in several cases disappointment has been the only issue of their labor. Indiana and North Carolina are the only States in which any alteration in existing laws has been made.

The committee had entered into correspondence with medical gentlemen in the different States with regard to the working of laws for the regulation of the practice of medicine, and their replies were submitted.

DR. BENJAMIN LEE, of Philadelphia, Pa., read a paper on

HEALTH OFFICERS, ANCIENT AND MODERN.

The important position assigned to hygiene and State medicine during the past decade, is an evidence at once of the advanced stage of civilization, and of the dense and rapidly increasing population. It also indicates that long occupancy of the land by successive generations has, at length, overtaxed the regenerative and self-purifying energies of the earth, and that extraordinary methods have now become necessary.

Reference was then made to the honors bestowed on the officers of public health in ancient Rome, and the high esteem in which they were held. To this was largely attributed the excellent sanitary condition of that city.

The second portion of the paper was occupied with a consideration of the organization of Boards of Health. The first point made was that in selecting the material for Boards of Health, politics, in the bad American sense of the term, should be rigidly excluded. Where it is possible to avoid it, the members should not be elected by the people; especially is this the case in large cities.

Secondly, boards of Health should be composed chiefly of physicians; but at least one member should be a man eminent among his fellows for prudence and judgment in trade and commerce; for doctors are, proverbially, bad business men.

Thirdly, as it is desirable that there should be harmony of action and of sentiment between the municipal government and the Board of Health, there should be a representative of one on the other.

Fourthly, it is essential for the practical working of the Board that it should employ a paid agent, who shall devote as much time as is necessary to inspection and investigation of the sanitary conditions of the locality, and carry into execution the orders of the Board.

Finally, every member of the Board should receive a fair and even generous compensation for his labors.

AFTERNOON SESSION.

The meeting was called to order at two o'clock.

DR. SAMUEL N. NELSON read a paper, entitled

MICRO-ORGANISMS AND THEIR RELATION TO DISEASE,

describing the micrococci found in various diseases, the results of their culture, and giving a careful *résumé* of the literature of the subject.

The next paper was on

OBSERVATIONS OF THE RELATION OF BACTERIA TO CERTAIN PUERPERAL INFLAMMATIONS,

by DR. ERNEST W. CUSHING, of Boston, Mass.

These observations were based on the results of examinations of the bodies of such women as died from these maladies in the general hospital at Vienna last spring. He called attention to the great difference between the customs and rules governing the obstetric assistants and students in Berlin and in Vienna. In the former city every precaution is taken to avoid not only direct infection, but also any possible carrying of germs in the hair or clothing, as if bacteria were freely present in the air. In Vienna, although the possibility of so finding them is admitted in theory, yet in practice the assistants and students are allowed to be present at autopsies. Obstetric operations and laparotomies are performed before the whole class without spray, and the chief assistants give operative courses on the cadaver every afternoon, relying for safety on washing, bathing, and change of clothing. Practically, sepsis arising in the hospital is very rare, and the results obtained by avoiding direct infection through the fingers and instruments were regarded by the speaker as an argument in favor of the view that puerperal fever is not an entity, the poison of which is carried about in the air and enters the system through the lungs, etc., but that such fevers are the result of invasion and multiplication of bacteria, arising from infection of the uterus or abraded vagina, as a rule, directly from hands, instruments, or applications.

Discussing the results obtained by the examinations above mentioned, the reader stated that the most frequent cause of infection was the strepto-coccus; the next the staphylo-coccus, with which is frequently associated the bacillus pyogenes fœtidus. The first occurs in chains not distinguishable from those of erysipelas, the cocci usually lying in pairs, each pair representing a link. The staphylo-cocci occur in bunches, like those of grapes. One or the other of the above were found in all acute cases examined, and were present in the uterine or iliac veins. In pelvic abscesses they were found in the lungs and joints, and, in fact, wherever metastatic abscesses occurred. Microscopic preparations of the above were exhibited, and three specimen cases described. Finally puerperal inflammations were compared to infected wounds. The powers of the system to resist, fence out, and kill the invading bacteria when the latter are not continually reenforced were emphasized, and an active hopefulness was advised in regard to treatment, which, to be successful, should be analogous to that of surgical wounds, *i.e.*, prompt removal of decomposing matter, evacuation of pus, cleansing and disinfective douches and drainage.

In discussing this paper, DR. R. STANSBURY SUTTON said that while there was no question as to the success achieved by the use of antiseptics in general surgery, yet in abdominal surgery the best results so far had been obtained by strict attention to cleanliness, without the use of any antiseptic agencies. He agreed with Dr. Cushing that when the poison enters the abdominal cavity in laparotomy, or into the vagina or uterus in puerperal cases, the germs are not carried by the atmosphere, but by the hands, the forceps, ligature, or instruments. As far as abdominal surgery was concerned, he thought that all chemical agents could be discarded, but cleanliness could not be lost sight of. He then referred to the injurious effects which had at times resulted from the absorption of such agents through the peritoneal.

DR. HENRY O. MARCY related a case bearing on the introduction of antiseptics into the peritoneal cavity. It was that of a child four years of age, whose abdomen was filled with pus, in which the straptococcus was found. The pus was evacuated and the peritoneal cavity thoroughly washed out with bichloride of mercury solution. The patient recovered without a bad symptom.

"Medical Licenses and Medical Honors" was the title of a paper read by Dr. Edward Jackson, of Philadelphia.

A paper entitled "The Physician and his Patient," by Dr. J. D. Kelly, of Utica, N. Y., and one by Dr. Lewis P. Bush, of Wilmington, Del., "On the Physicians of Delaware in the Eighteenth Century," were read by title.

The President-elect was then introduced, and made a brief address.

The Academy then adjourned.

NEW YORK ACADEMY OF MEDICINE.

SECTION IN OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN.

Stated Meeting, October 22, 1885.

ALEXANDER S. HUNTER, M.D., CHAIRMAN.

DR. HOWARD PINCKNEY presented a

HYDROCEPHALIC HEAD OF A COLT,

the mother and the foal dying during the process of parturition. There were only three cervical vertebræ present, but in other respects the body was normal. The face presented a striking resemblance to that of a bulldog, by which the mother was frightened during pregnancy. Dr. Pinckney, and also Dr. Garrish, thought that if craniotomy had been performed the life of the mother would have been saved.

DR. POST remarked that deviation from the number seven cervical vertebræ was exceedingly rare in mammals.

DR. JOHN C. PETERS donated eight bound volumes on obstetrics and kindred subjects to the Section, and accepted its thanks with the remark that all kinds of medical books, pamphlets, and journals would be received thankfully by the Academy, as they could be utilized in many ways for the benefit of the library.

DR. MALCOLM MCLEAN then read a paper entitled,

THE MANAGEMENT OF UNFAVORABLE CEPHALIC PRESENTATIONS AT THE SUPERIOR STRAIT, ESPECIALLY THE OCCIPITO-POSTERIOR POSITIONS,

in which he advanced the view that these positions were essentially mal-positions, and that none were more important. He believed that more difficulty and delay arose from this cause than from all other causes of difficult labor, and the difficulty existed in the fact that the head of the child did not properly adjust itself to the pelvic canal. These positions should be recognized as early as possible, and be corrected at the earliest possible moment.

Short, abortive pains, recurring for hours in the first stage of labor, with the head high in the pelvis, excited his suspicion at once that the head was not properly engaging at the brim.

With reference to diagnosis by digital examination, he maintained that one suture could not be distinguished from another with satisfaction; nor, by means ordinarily practised, could the fontanelles be differentiated. The sense of touch by the finger could not be depended upon in recognizing the sutures and fontanelles; something more defined must be searched for, and that was *the ear*, and to do that the hand must, to a greater or less extent, be introduced. In order to have a perfectly sure appreciation of the exact position of the head, it was not enough to examine by digital touch only, but the hand must be introduced sufficiently to enable the operator to recognize the ears of the child, and at the same time the hand is made to appreciate the condition of the pelvic canal as well as the condition of the funis, which might be so situated as to prevent proper rotation.

A blade of the forceps should never be introduced before the hand has been introduced, and a complete exploration made.

What shall be done when these unfavorable positions

of the child's head are recognized? Flex the head properly with the hand, which, as a rule, could be done easily; rotate the occiput in such direction as will secure its descent over one of the anterior planes. But in certain cases the head of the child will not remain in the position in which it has been placed, and in those cases it remains to resort to either the forceps or to perform version. The forceps were most commonly resorted to, and, as a rule also, they slipped as often as they were used. Slipping of the forceps, Dr. McLean regarded as evidence of their misapplication in the case. Tarnier's forceps, as modified by Lusk, answered a most excellent purpose, but even that was an exceedingly powerful instrument and liable to do harm.

The treatment which he especially recommended was *podalic version* accomplished by the combined method. Version, properly performed, was the operation to be selected if the position could not be easily rectified, and, as an operation, it was less dangerous to both mother and child than the long forceps when applied at the superior strait.

Dr. Isaac E. Taylor opened the discussion and said that he had been surprised at the views advanced by the author of the paper. Conservatism was a great point in the practice of obstetrics, and never more so than while dealing with occipito-posterior positions. The statements of Naegele could not be set aside when he reported that he encountered only seventeen cases out of over seventeen hundred in which the occipito-posterior position terminated posteriorly. His views coincided nearly with those of Naegele, and his experience, during forty-five or fifty years, had shown that rotation anteriorly takes place in most cases, and that the rotation was favored by the planes of the pelvis, by the rigid action from the spine of the child, and by spiral uterine contraction which flexed the head. If rotation did not take place, certainly forceps should be applied. When the head of the child was in the pelvic cavity, and rotation has not occurred, certainly version should not be resorted to. It might, however, be made a face presentation, and he believed that many of the occipito-posterior cases became cases of face presentation without interference. Suppose the head is brought down into the pelvic cavity and it does not rotate, then push the occiput up with two fingers and make a face case.

With regard to diagnosis, he never was guided by either the fontanelles, sutures, or the ear, but by the general contour of the child's head occupying a certain portion of the pelvis; whatever segment was occupied by the occiput was filled so that the finger could not be swept around it, whereas the opposite segment gave sufficient room to sweep the finger around in all directions.

Dr. Taylor did not think it was necessary to introduce the hand to perform version, as it could be easily performed with two fingers aided by external manipulation.

Dr. W. M. Polk had been interested in the paper because the author took a position so strongly in favor of a view that was not generally accepted. As he understood from the paper, the writer rather held to the view that all cases of occipito-posterior position should be treated by version. If that was so, Dr. Polk thought it would be simply enlarging the domain of operative obstetrics, and rather recklessly, too. Of course, if the operation was performed, it must be when the child was high up in the pelvis, and before nature had done anything toward bringing about rotation.

Dr. Polk was also led to suspect that many of Dr. McLean's cases were really those of slight contraction at the brim, and in the absence of any statement on that point, was disposed to regard the difficulty encountered as due to slight narrowing at the superior strait, which was much more common in this country than writings on obstetrics would lead us to suppose. Wherever this slight deformity existed, labor was interfered with necessarily, and assistance would be required particularly by version, which he regarded as preferable to the use of the forceps.

With regard to diagnosis, Dr. Polk supposed that every man who used the forceps at the superior strait, never did so without the administration of an anæsthetic, and the introduction of the entire hand into the vagina and the fingers through the internal os, for the purpose of mapping out in his mind the position of the child's head. As for attempting to diagnosticate the position without the hand in the vagina, he would not think of it, as it was utterly impossible, as Dr. McLean had already stated.

So far as the general proposition laid down by the author of the paper was concerned, that cases of occipito-posterior position should be treated by version at the superior strait rather than by the use of the forceps, he was unwilling to accept it. If it could be shown that there was the slightest narrowing at the brim, or disproportion between the child's head and the pelvic cavity, he stood ready to resort to operative interference. But the paper meant to state, as he understood it, that version or forceps should be used for correcting a position of the child's head at the superior strait, which was regarded as a natural position, and which nature had shown herself capable of taking care of until the head was near the floor of the pelvis, where it could be reached by means of the forceps with little danger to the tissues of the mother.

When the head was low down in the pelvis it would not rotate, and then by all means interference by means of the forceps was demanded, because it was too late to resort to version.

Dr. Polk preferred to let his cases of occipito-posterior position alone at the superior strait, unless he found that there was difficulty in the engagement of the head, and then he put his hand into the cavity of the vagina, and endeavored to ascertain whether or not there was any disproportion between the child's head and the pelvis.

Dr. Taylor referred to the necessity of seeing that the shoulders rotated properly.

Dr. F. V. White spoke of the unreliability of the sutures and the fontanelles as aids in making a diagnosis.

Dr. H. Griswold reported a case of occipito-posterior position with narrowing at the brim of the pelvis, and in which he introduced his hand, rotated the head forward, and subsequently delivered with Tarnier's forceps.

Dr. McLean in closing the discussion said, that if his words had conveyed the idea that he desired to be a meddlesome operator, his language had done him great injustice. His intention was to inveigh against mischievous interference in these cases, and to advocate conservatism in the fullest sense. What he had said was, that in many of these cases rotation forward does take place and the children are delivered naturally. He also had said that forceps had been applied in many cases where no such operation had been needed at all. He simply turned to version instead of the use of the *long* forceps, and the cases in which he would interfere were those which were delayed on account of perversion of the first stage of labor. Inasmuch as these cases are tedious, practitioners are called upon to do something for the relief of the woman, because nature does not always rotate the occiput anteriorly. Certainly, such are sufficiently frequent to make the obstetrician seek for some means of relieving the patient. Where nature shows not the slightest inclination to bring the head down, if neither flexion nor extreme extension, changing it to a face presentation, occurs, something must be done.

The change into a face presentation, mentioned by Dr. Taylor, was an important point, and one which was inadvertently omitted from the paper.

If these cases do require assistance, the question arises, what shall be done? The general practice is to use some form of forceps, but Dr. McLean believed that this was not the best means for completing delivery, and that version was better adapted to such cases than the use of

the forceps; version to bring the head down where it can rotate.

His paper did not teach that *all* cases of occipito-posterior position should be treated by version; simply version in delayed cases, and not in all cases, by a very large majority.

With regard to contraction at the brim, that was not the condition in the cases referred to, and one good point in the evidence that there existed no narrowing was the fact that previous labors, with large children, had been completed naturally, and within the average length of time.

Dr. McLean was unprepared to believe that the average practitioner introduced his hand before applying the forceps.

The Section then adjourned to meet on the fourth Wednesday in November.

Correspondence.

OUR LONDON LETTER.

(From our Special Correspondent.)

OPENING OF THE SOCIETIES—THE OBSTETRICAL SOCIETY—DR. DUNCAN'S LUPUS OF THE VULVA SHOWN TO BE SYPHILIS—MR. HUTCHINSON'S OPINION—DR. DUNCAN'S REPLY—HIS REPUTE AS AN EXAMINER—OTHER EXAMINERS AT THE LONDON UNIVERSITY—THE CLINICAL SOCIETY—HÆMATAMESIS NEONATORUM—REMOVAL OF SAC IN HERNIA—TREPHINING—ABERNETHIAN SOCIETY—THE TEMPERANCE HOSPITAL.

LONDON, October 17, 1885.

CLOSELY following on the introductories at the schools comes the opening of the session of the medical societies. The Obstetrical leads the way, and on the 7th inst. we had a rather lively meeting. Dr. Mathews Duncan brought forward what he persists in calling "lupus of the vulva." At a former meeting he had read a paper on the subject, and now gave the sequel. On that occasion he was reproved as gently as his brother obstetricians knew how for calling the disease he described by a name which was otherwise employed, and with which they alleged it had no connection. Dr. Duncan did not take the rebuff at all kindly—he is not the sort of man to tolerate opposition to, or even questioning of, his opinions. He went on repeating his statements and teaching that "lupus of the vulva" was a distinct disease. At the opening of the society, then, this year, he was afforded the opportunity of re-stating his opinion, which he did in his usual dogmatic style. But his friends had prepared for him a surprise. They had no notion of settling the matter by assertion only. Many of them felt sure Dr. Duncan had mistaken syphilis for lupus, and secured the presence of that eminent and indefatigable syphilographer, Jonathan Hutchinson, who, with his natural courtesy and kindliness of manner, began his remarks by commending the clinical description of the cases, and then proceeded calmly, apparently unconscious of the bitter dose he was administering, to state that the cases had no relation whatever to lupus, but were simply manifestations of syphilis. Then he pointed out, as naturally as if teaching his class, that one of the cases was termed by Dr. Duncan "syphilitic," and in every one of the others, points in the history might have suggested if they did not prove that there had been infection of the constitution with syphilis. The effect of Mr. Hutchinson's speech was remarkable; there was a chuckle of delight among the majority, who felt that this settled the matter, and that Dr. Duncan had been deservedly "sat upon."

Dr. Thin ventured a few words in support of Dr. Duncan on histological grounds, and Dr. West tried to offer him some support, but it was very feeble. All the other speakers disagreed, and when Dr. Duncan got up to reply he was at white heat. Lupus, he declared, was a convenient term; it was well understood; the disease had a large literature. He did not assert that it was quite identical with lupus vulgaris; but, as for syphilis, to accept such evidence as Mr. Hutchinson had mentioned, was unreasonable—the "most unreasonable thing he had ever heard of." Rather strong language this, but what remained to be said by a man who disdains to learn. Any one could see that the whole audience regarded Mr. Hutchinson's verdict as final, and the only interest that continued to attach to the meeting was curiosity as to how Dr. Duncan would comport himself under his mortification.

Obstetricians are not remarkable for their mutual love and self-respect, but in this instance the delighted chuckle goes far beyond the circle of the society, for though a very able and learned man, Dr. Duncan does not find grace in the eyes of many practitioners, and still more, students. He may be genial and jocose among his intimates, but his bearing and manners are self-assertive and uncouth, and at the examination-table he is dreaded—just as his brother Scotch professor, Rutherford, was—and the contemptuous expression "Scotch manners" is applied to both by men who have had to face them. Last year at the University of London, a question was set in obstetrics, which excited the condemnation of most of the teachers of the subject as manifestly unfair; it was entirely as to hæmatokolpos, a condition (which might well puzzle any one who forgot the meaning of the Greek word kolpos) which is not described in any of the ordinary text-books under that name, although it is in Dr. Duncan's own lectures, and which is so rare that very few cases have been described in obstetrical literature. Of course, Dr. Duncan got the credit of setting the question, but his co-examiner on the occasion, Dr. John Williams, might perhaps have proposed it; at any rate he must have sanctioned it, and therefore should share the blame. It is perhaps as well for Dr. Duncan that his term of office as examiner has expired, and he may perhaps never again seek a position for which he is ill adapted. It may not be much better for students, for Dr. John Williams is reported, even in his own school, to be, with all his ability, anything but a pleasant acquaintance across an examination-table.

It is one great fault of the London University that its examinations may be conducted by persons whose only qualification is that they are appointed by the Senate—being mostly persons who have attained a certain reputation in the subject either as teachers or authors—and so students are subjected to the crotchets of a series of experts on numerous subjects, and some of these experts have shown themselves destitute of all sympathy with students, and otherwise ill qualified for their tasks. I could give you illustrations in the several faculties, but must return more strictly to medical subjects, and especially our societies.

The Clinical Society resumed work on the 9th under the presidency of Mr. Bryant. Here Dr. Sawtell related a case of hæmatemesis and melæna in a new-born child, fatal in the course of twenty-four hours. The first time blood was vomited was about twenty-one and a half hours after birth, up to which time milk had been taken, and the vitality was not very low. The hemorrhage continued, mixed with meconium and mucus, and the child soon sank. At the autopsy there were small, deep, round, and oval ulcers at the cardiac end of the stomach near the lesser curve. Dr. Sawtell had not found the record of a precisely similar case after extensive search. I find that Dr. Goodhart's book recognizes that gastric ulcers may occur in the new-born, and attributes the cause to disturbance of the circulation incident to the closure of placental supply and the commencement of aerial respiration. Dr. Crocker compared this case to purpura neonatorum. This, when confined to the skin, usually does well, but when it affects mucous membrane is naturally more formidable.

Mr. Lucas next related two cases of strangulated hernia treated by excision of the sac and skin covering, with

suture of the ring after reduction. He was not induced to adopt this procedure by the desire to effect a radical cure, though this was an incidental advantage, but with the hope of reducing the mortality. He looked on the sac as a danger, and wished to rid the patient of the ill-nourished, over-strained abnormal tissue with its liability to slough, suppurate, and collect discharges, or guide them into the peritoneal cavity.

Both the cases were umbilical, and it was suggested by the president that the discussion should be confined to that form. There was a considerable difference of opinion evinced—and that was among Guy's surgeons, where the operation has been most done—thus proving that there is room for careful study of the subject. Mr. Barker had practised the method successfully. Mr. Howse thought each case should be treated on its merits, and where the sac was healthy its removal would increase the risks of the operation. In strangulated hernia delay constituted the chief risk, so only a few hours should elapse before an operation was undertaken. Mr. G. Bird endorsed the practice, but not the explanation. The practice had for some years been adopted. Mr. Walstrom had cut away the sac in twelve cases—three umbilical, seven femoral, and two inguinal. Unless seen long afterward, and no truss had been worn, he should not say they were radical cures. Mr. Makins had recently operated in a similar way on one case. Mr. Ballance removed the sac and many square inches of skin, and as much omentum as possible. Mr. Symonds said when the sac was small it was not necessary to remove it; in femoral hernia he always removed it. Mr. Godlee did not think complete separation of the sac easy to do, as it was so closely united to the skin over a large area. Mr. Hopkins operated on a man of seventy, who had softening of the brain, but the operation was recovered from.

The next subject was trephining for compression of the middle meningeal artery by a clot. Mr. Charters Symonds related a case in which he had trephined, and after much difficulty arrested the hemorrhage. The man recovered consciousness, and on conclusion of the operation he gave his name and address, but the next afternoon pulse and temperature rose, he became delirious and sank. It was suggested that compression of the carotid might be useful in such cases, and Mr. Bryant had noticed in an American journal an article on ligaturing the carotid for such cases. Altogether the Clinical had a good opening meeting.

The Abernethian Society is the St. Bartholomew's Students' Society, and is sometimes frequented by older "Bart's men." This year it was opened on the 8th with an address by Morrant Baker, who traced the early history of old Bart's to its foundation of centuries ago by Rayer or Raherus, and gave a number of curious gleanings from the early chapters of this long story.

The other London Societies will open next week. The provincial societies do not all observe the same period as those in the metropolis.

The Bishop of London on the 9th inst. opened the new wing, containing seventy beds, of the Temperance Hospital. He gave an address in which he recognized the value of medical services. The bishop (Dr. Temple) is a strong supporter of the temperance cause, and the President of the National Temperance League. In the hospital the mortality has been low, and alcohol only prescribed about once in a thousand cases.

There may be various reasons why alcohol is less called for than in former days. But whatever be the explanation, there is no doubt that it is much less prescribed, and no one can say that practice is less successful.

The hospital has done good service in emphasizing the fact, and proving how little alcohol is necessary; but even without this, no doubt the thoughtful investigations of therapeutists would have done something to check the indiscriminate prescription of alcohol which proved so injurious.

From the time when the late Professor Parkes spoke out, the Temperance party has been making steady progress in the medical profession.

The references to the matter in the introductories has opened the floodgates of the controversy on the right of London students to the degree of M.D.; the obstinate policy of the London University, which is driving men from the metropolitan schools, and the relative value of various diplomas—all knotty subjects, and to some degree unprofitable, but with which we are again to be overwhelmed, for no statesman seems inclined to take up the grievances of the profession and settle our differences.

TYPHO-MALARIAL FEVER.

To the Editor of The Medical Record.

Sir: In your last issue, among the proceedings of the Section in Practical Medicine of the New York Academy of Medicine, I am credited with the following remark (p. 502): "I believed that there was such a thing as typho-malarial fever, and did not believe that it was the same disease as typhoid fever." What I meant and hoped to say was this: That there are *complications* of typhoid and malaria. The sickness, as I have observed it repeatedly, runs, in most cases, a long course. For weeks no other diagnosis can be made but that of typhoid, for there is high fever (though not necessarily with the regular curves to which we are treated in the books), swelled spleen, also roseola, and the intestinal symptoms with or without diarrhœa. The fever will not, or but little, diminish toward the end of the third week and continues into the fourth or fifth week. About that time chills will (may) make their appearance. In well-pronounced cases I have observed two distinct chills, at more or less regular hours, with more or less perspiration following, through a period of from six to ten days. Quinia has not such a prompt effect as in the common uncomplicated form of malarial fever. There is no complete apyrexia, but a moderate remission only; then, instead of two daily chills there will be but one, and this will disappear after awhile, to be followed for some time by a fever with the remittent type.

Yours very respectfully,

A. Jacobi, M.D.

110 West Thirty-fourth Street.

Army News.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from October 25, 1885, to October 31, 1885.

Huntington, D. L., Major and Surgeon. Detailed on Board to inspect Army and Navy Hospital Buildings, at Hot Springs, Ark. S. O. 245, A. G. O., October 24, 1885.

McElderry, Henry, Major and Surgeon. Granted leave of absence for four months, from November 1, 1885. S. O. 246, A. G. O., October 26, 1885.

Patzki, J. H., Captain and Assistant Surgeon. Appointed member of Board to meet at Forts Jackson and St. Philip, La., on November 5, 1885, to select a site for the new quarters for the Ordnance Sergeants at those posts. S. O. 230, Department of the East, October 28, 1885.

Tousey, G. H., Captain and Assistant Surgeon. Granted leave of absence for two months, to take effect after the return from leave of absence of Surgeon J. C. Baily (Major). S. O. 87, Division of the Atlantic, October 24, 1885.

Barrows, C. C., First Lieutenant and Assistant Surgeon. In addition to his other duties, to take temporary charge of office of the Medical Department of the Division of Arizona. S. O. 102, Department of Arizona, October 17, 1885.

EWING, C. B., First Lieutenant and Assistant Surgeon (Fort Leavenworth, Kans.). To accompany Congressional Committee, of which Hon. W. S. Holman is chairman, in its visit and inspection through Indian Territory. S. O. 160, Department of Missouri, October 23, 1885.

IVES, F. J., First Lieutenant and Assistant Surgeon. Relieved from temporary duty at Fort Laramie, Wyo. Ter., and ordered to Fort D. A. Russell, Wyoming. S. O. 106, Department of the Platte, October 22, 1885.

MORRIS, E. R., First Lieutenant and Assistant Surgeon (recently appointed). Assigned to duty at Fort Bayard, N. M. He will continue on detached service under orders of District Commander. S. O. 160, Department of the Missouri, October 23, 1885.

Medical Items.

ANIMALS AS MEDICAL PRACTITIONERS.—M. G. Delaunay, in a recent communication to the London Biological Society, observed that medicine as practised by animals is thoroughly empirical; but the same may be said of that practised by inferior human races, or, in other words, by the majority of the human species. Animals instinctively choose such food as is best suited to them. A large number wash themselves and bathe, as elephants, stags, birds, ants. In fact, man may take a lesson in hygiene from the lower animals. Animals get rid of their parasites by using dust, mud, clay, etc. Those suffering from fever restrict their diet, keep quiet, seek dark and airy places, drink water, and sometimes plunge into it. When a dog has lost its appetite, it eats that species of grass known as dog's grass (*chien dent*), which acts as an emetic and a purgative. Cats also eat grass. Sheep and cows, when ill, seek out certain herbs. An animal suffering from chronic rheumatism always keeps, as far as possible, in the sun. The warrior ants have regularly organized ambulances. Latreille cut the antennæ of the ant, and other ants came and covered the wounded part with a transparent fluid secreted from their mouths. If a chimpanzee be wounded, it stops the bleeding by placing its hand on the wound, or dressing it with leaves and grass. When an animal has a wounded leg or arm hanging on, it completes the amputation by means of its teeth. A dog, on being stung in the muzzle by a viper, was observed to plunge its head repeatedly for several days into running water. This animal eventually recovered. A sporting dog was run over by a carriage. During three weeks in winter it remained lying in a brook, where its food was taken to it. This animal recovered. A terrier hurt its right eye. It remained under a counter, avoiding light and heat, although it habitually kept close to the fire. It adopted a general treatment, rest and abstinence from food. The local treatment consisted in licking the upper surface of the paw, which it applied to the wounded eye; again licking the paw when it became dry. Animals suffering from traumatic fever treat themselves by the continued application of cold, which M. Delaunay considers to be more certain than any of the other methods. In view of these interesting facts, we are, he thinks, forced to admit that hygiene and therapeutics, as practised by animals, may, in the interest of psychology, be studied with advantage. He could go even farther, and say that veterinary medicine, and perhaps human medicine, could gather from them useful indications, precisely because they are prompted by instinct, which are efficacious in the preservation or restoration of health.

A PROPOSED REMEDY FOR THE ABUSE OF MEDICAL CHARITY.—Dr. Charles E. Young, of 334 West Fifty-ninth Street, suggests that the Charity Organization Society be asked to investigate every applicant for dispensary relief, and he suggests that the following or some similar plan be adopted by the various institutions: "Let all dispensaries issue similar cards to applicants for gratuitous treatment. On the back of these cards shall be printed the following rules: I. Upon receiving this ticket from the dispensary, the patient, in person or through a representative, must take it to the office of the Charity Organization Society, No. 79 Fourth Avenue, to receive the signature of the Society, before a second treatment at the dispensary can be expected. II. All applicants for free treatment must expect investigation from the Society at their homes. III. In return for services rendered patients will be expected to exhibit themselves for scientific purposes, if requested to do so, at any time and place named by the physician in charge of the case, and to return again for treatment if desired by him. IV. Failure to comply with these rules, or loss of this card, will forfeit the right to further treatment. The other side of the card may contain the usual lettering of the dispensary by which it is issued, space being left for the signatures of the Charity Organization Society and of the physician in charge of the case. The following rules are to be made known to each dispensary physician, so that all may understand and act together in the work: I. Whenever a patient appears for the first time, treat him if the case be doubtful, but call attention to the rules on his card. All cases known to be unworthy may be turned away without investigation, and if any money has been received by the dispensary from him it must be refunded. II. No money beyond the regular dispensary charge must be accepted from patients at the dispensary. III. Any patient appearing a second time without the signature of the Charity Organization Society upon his card must be turned away without further treatment. IV. Any physician not complying with these rules thereby severs his connection with this institution."

FRANKLINISM IN MEDICAL PRACTICE.—Mr. C. W. Meyer writes concerning the machines now generally in use for the production of statical electricity, and believes that were they simplified, and thereby reduced in cost, the general adoption of this useful therapeutic agent in medical practice would be greatly facilitated. He thinks that the air-tight glass case, which is one considerable item in the cost of the machine, might very well be dispensed with. It is true there would then be some days in which the machine would not work, but these days are relatively few, and the inconvenience experienced at such times would be counterbalanced by the greatly reduced price of the instrument. Mr. Meyer believes that a good fourteen-inch plate original Holtz machine will answer every purpose for the general practitioner, and by reason of its great cheapness, as compared with a self-charging air-tight machine, is within the reach of everyone.

THE DANISH NAME FOR IT.—In several notices which have appeared of late in the *Hospitals-Tidende*, concerning the next meeting of the International Medical Congress, and the causes which seem destined to prevent its being held in this country, mention is constantly made of the American med. ass., Am. med. ass., or A. m. ass. Why does the organ not protest against such levity?

AN EXTEMPORANEOUS TEST FOR HUMAN MILK.—Dr. Helot says that it is possible to judge with sufficient accuracy of the quality of human milk by comparing the number of drops in a given quantity of milk with those in a like amount of distilled water. Of course, the absolute number of drops will vary according to the diameter of the delivery tube, but the relative proportion will remain the same. This proportion should be about six drops of milk to five of water. The best instrument for measuring is the ordinary hypodermic syringe, made to contain one-half drachm of fluid. If now at a temperature of 58° F. it requires thirty drops falling from the end of the needle to empty the syringe, we should get at least thirty-five drops of milk, and if there are thirty-six or thirty-eight drops it is so much the better. Milk which gives no more than thirty-three drops to thirty of distilled water is not good, Dr. Helot says, and it will be necessary to secure another nurse in such a case.

RESTORATION TO SANITY FOLLOWING ERYSIPELAS.—A case is reported by Dr. Landerer, of a young girl suffering from melancholia, who was attacked with erysipelas of the face and scalp. There was abundant suppuration, and it was necessary to incise the scalp in several places. Upon recovery from the erysipelas it was found that the mental disturbance was completely and permanently cured.

A RUSH FOR PRIORITY.—An amusing circumstance was related in a report presented recently to the Academy of Medicine of Paris. It appears that M. Brondel had announced that by means of electricity he could cause medicinal substances to penetrate into any of the tissues or even to pass entirely through the body. He endeavored to prove this in the presence of some members of the Academy by means of the starch test with iodide of potassium. The experiment did not succeed until, the starch compress becoming disarranged, the manipulator readjusted it. The characteristic iodine coloration at once became visible, but it was shown that there was iodide of potassium on the experimenter's fingers, not having been washed off carefully, and M. Blondel very frankly acknowledged his mistake. But the joke was that between the time that he had announced his discovery and had found out his error, numbers of communications had come from all sides from different electricians claiming priority in this grand discovery, which was to revolutionize therapeutical science.

HYPEREMBRYOHYDROMETROTROPHY.—This is merely another name for pregnancy.

SEA-VOYAGING AS A CURE FOR BARRENNESS.—Surgeon-General Charles R. Francis writes to the *Indian Medical Gazette* an instructive and suggestive letter upon the subject of the influence of sea-voyages upon the genital function. As will be seen, sea-voyaging is at times a therapeutic measure of prodigious, not to say dangerous, potency. Dr. Francis says: "A young lady in India, of leuco-phlegmatic temperament, and remarkable for want of energy, which was conspicuous even in her languid mode of speech, had been married for seven years without any prospect of having a family, there not having been the slightest indication of pregnancy during the whole of this period. The husband was also young, and in good health. Being, however, of a kindly disposition, and never expecting to be as ladies wish to be, etc., Mrs. A—— surrounded herself with pets—small dogs, birds, and a monkey. At the end of the seven years she accompanied her husband (a civilian) to England on furlough. They went by the long sea-route round the Cape (of Good Hope). In those days—I speak of thirty years ago—a voyage home in a sailing-vessel (one of the large passenger ships of the time) was very invigorating. A comfortable cabin—one's own private residence for three months at least, so different to the comfortless system of berths in a general cabin in a so-called overland steamer—the soothing influences of the sea, the tonic air, etc., all combined, provided one was abstemious in the matter of food and intoxicating drinks somewhat freely provided in most of these vessels, to produce (in good sailors) a vigorous state of health, which, coming after a lengthened sojourn in a hot climate, was especially enjoyable. The lady became pregnant on board; and the activity of the reproductive function (thus roused) being maintained for several years, even after the return to India, this pregnancy was followed by others; and, as a matter of fact, a child was born annually for ten successive years, the deficiency of the first septennial period being rather too prolifically made up afterward. I have been six times round the Cape in passenger vessels and four times overland, and I quite believe in the stimulating effect—not always for good—of a sea-voyage (long or short) upon the ovario-uterine organization. In prescribing this remedy, however, in cases of sterility, the medical practitioner might, with the experience of that just related, be inclined to pause, feeling that possibly his patient might hereafter tax him with having prescribed rather too much of a good thing!"

DA COSTA ON THE TREATMENT OF PULMONARY CONSUMPTION—*Hygienic Treatment.*—Out-door exercise, good food, warm clothing; climate of paramount importance. The best climate, by far, is that found in Egypt; Algeria is a good place. In this country, New Mexico, Southern California, South Carolina, Thomasville in Georgia, Florida. Colorado, for some cases, is an excellent climate. Cases having a co-existing bronchitis do better in a damp and mild climate, as Florida, etc. The element of change is very useful. The Adirondacks is a fine place for those early cases in which there is no tendency to hemorrhage. Prof. Da Costa does not care much for the "milk diet," but allows it in conjunction with other things. Give plenty of meats, and alcohol in moderation, especially in those cases free from fever. Mix it with ol. morrhuæ, to lessen the tendency to its abuse. Whiskey and brandy are the best stimulants here. You need not interdict smoking.

Medicines.—Ol. morrhuæ is of great utility by improving nutrition and also by affecting the tubercle. Do not use its substitutes, as glycerine, etc. Give f ʒ ss. ter die, one hour after meals. To disguise it, and to promote its ready absorption, give ♏x.–xv. ether, but this sometimes causes belching. Mix it with equal amount of malt or whiskey. When the appetite fails stop its use for a while. Do not permit the oil to be taken in hot weather. Next in importance is arsenic in small doses in the early stages; arsenious acid, gr. $\frac{1}{60}$, or gtt. iij. Fowler's solution, ter die. In the late stages it will be of no avail. A third remedy is iodine; it should be more generally used; liq. iodi comp., gtt. i.–iij. ter die, with potassium iodide to alternate with it. When anæmia is present, *and not much fever*, use iodide of iron. It is very valuable. Push it up to the point of tolerance. Begin with gtt. xv. of the official syrup, and push up to f ʒ j. ter die. Prof. Da Costa does not like the hypophosphites. They have no special effect, as ol. morrhuæ and arsenic. Inhalations of sodium benzoate are of no use. Carbolic acid and tar by inhalation are of some avail.

Treatment of special symptoms.—Entirely too much is done for the symptoms. For cough we should give no expectorant, unless bronchitis exists. Since the cough is generally an irritative one, morphia must, in time, be given. Codeia, gr. $\frac{1}{8}$–$\frac{1}{4}$, in simple elixir, often has a wonderful effect and does not constipate. Prussic acid or fluid extract of wild cherry is very useful at times. We may combine the acid with morphia. Inhalations of oil of eucalyptus give relief.

Night sweats.—Give atropia, gr. $\frac{1}{60}$, at bed-time. Sponge off the body with hot water to constringe the vessels. Infusion of sage at night. Mineral acids, especially sulphuric acid. Zinc oxide, gr. ij. ter die. Ergotin or fluid extract of ergot is better than morphia in some respects. It is more permanent and does not cause dryness. Give ergotin, gr. ij. ter die, the last dose at bedtime.

Digestive system.—The patient often has vomiting. Two excellent remedies may be given, as carbolic acid or creasote, gr. $\frac{1}{4}$, four times per diem. Strychnia, gr. $\frac{1}{60}$, ter die, is also of great value.

Diarrhœa.—Opium, bismuth, ʒ j.; copper sulphate, gr. $\frac{1}{15}$; silver nitrate, gr. $\frac{1}{4}$, etc.

The throat in phthisis.—It may be swollen, and the larynx the seat of ulcers, which may become tubercular. Drink demulcents, as Irish moss (ʒ j. to the O j.).

Prof. Da Costa has confidence in local applications of iodoform and cocaine. Let the patient eat his meals while the parts are under the effect of cocaine.

For *irritative fever*—

℞. Quininæ sulph..... gr. jss.
Digitalis..... gr. ss.
Opii..... gr. $\frac{1}{4}$.
M. Sig.—Ter die.

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Original Lectures.

THE PROGNOSIS AND TREATMENT OF SYPHILIS.[1]

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GENTLEMEN: Before taking up the subject of the treatment of syphilis, it may be well to direct attention briefly to the prognostic significance of the early manifestations of this disease.

The prognosis of the chancre, viewed in the aspect of a local lesion, is almost always favorable. In studying the clinical history of the initial lesion we have seen that it rarely gives rise to pain or other subjective symptoms, that it is limited in extent and duration, with a tendency to spontaneous resorption, and that it heals ordinarily without a cicatrix.

When complicated with phagedena, gangrene, or other inflammatory conditions, the local consequences may be more serious, resulting in more or less extensive destruction of the tissues, sometimes mutilation of the glans, urethral fistulæ, etc.; but, as a rule, the local process is a very simple affair.

But when viewed as the starting-point of a disease permeating the entire organism, capable of causing the most profound lesions, and practically indefinite induration, the prognosis is of much graver import.

No other infectious disease exhibits such a vast difference in its impress upon the organism, in the multiplicity, intensity, and duration of its symptoms, as syphilis. In some cases syphilis shows itself as essentially a mild disease, with slight and occasional manifestations, which, after a few months, cease altogether, and the patient remains to all appearances perfectly well. In other cases it is a most formidable disease; it determines a vast array of morbid manifestations, and may continue to reveal itself by destructive processes during the lifetime of the individual. Clinically, then, we must distinguish between mild and severe cases of syphilis.

Now it comes to be a question of great practical interest, whether we can trace a definite correspondence between the initial expression of syphilis and its subsequent manifestations. What are the relations between the source of the virus, the period of incubation, the anatomical characters of the chancre, etc., and the ulterior evolution of the disease? Can we, from a study of these initial characters, gain valuable indications which will enable us to forecast the future of the patient?

As regards the *source of the virus*, it may be very confidently asserted that it exerts no appreciable influence upon the character either of the chancre or of the constitutional accidents. Whether the contagion be derived from a primary or secondary lesion, whether from a simple erosion or a deep ulceration, is immaterial. It does not affect either the activity of the poison or its effects upon the system. It was formerly thought that the virus of a phagedenic chancre carried with it a more intense infective capacity, a greater potentiality for mischief; but we now recognize that phagedena is not a characteristic of the chancre; it is a property of the individual, and is, therefore, not transmissible.

In reference to *the period of incubation*, certain authorities have formulated the rule that the longer the incubation the milder the syphilis, and the shorter the incubation the severer the syphilis. This theory would seem to rest upon a rational basis, since the more prompt invasion of the system would seem to be an evidence of a feebler capacity of resistance. Unfortunately, however, clinical experience furnishes so many exceptions to this rule that its prognostic significance is of little value.

The next element of prognosis is to be sought for in the chancre itself—its induration, ulceration, and other specific characters. Does the *local action* of the virus upon the tissues, as revealed in the primary lesion, constitute a criterion by which we can estimate its *general action* upon the system? In other words, is the first visible manifestation of syphilis to be accepted as a correct index of its subsequent manifestations? Chancre has been termed the touchstone of the constitution, and we may assert very positively that a phagedenic chancre always portends a bad type of syphilis, for the reason that the phagedena is an expression of a bad state of the patient's constitution, which will probably be reflected in the character of the general accidents. In general it may be said that the more benign the chancre the greater the probability that the secondary accidents will be of mild type; but this correspondence does not always extend to the tertiary stage, since, as pointed out by Fournier, the severest forms of visceral syphilis often follow a chancre so insignificant as to pass unperceived by the patient. On the other hand, clinical experience furnishes many examples of a severe chancre, with voluminous induration, followed by a syphilis of mild or of medium severity.

We perceive, then, that the anatomical characters of the chancre do not always bear a definite relation to the character of the constitutional accidents.

Advancing a step further, to the advent of constitutional symptoms. After the disease has blossomed forth upon the skin and mucous membrane, does the first crop of eruptive accidents foreshadow the character of succeeding crops? Undoubtedly the early development of a pustular syphilide indicates a severe type of syphilis, and the same may be affirmed of the precocious development of ulcerative lesions; but, as a rule, it must be confessed that the benignity of early secondary symptoms does not furnish an absolute guarantee against the malignancy of tertiary manifestations. We must conclude, then, that the initial characters of syphilis do not furnish infallible signs which enable us to prognosticate the severity and duration of its processes. Our prognosis must be based upon conditions relating to the individual rather than to the disease.

We come now to the consideration of the treatment of syphilis. A patient presents himself to you with a recent chancre; you recognize this lesion as the starting-point of a long train of constitutional disorders, which may continue to recur during his entire lifetime. A most important question now arises; is it possible, by destruction of this lesion, to nip the disease in the bud, to prevent infection of the general system?

Now, many authorities very positively assert that excision of the chancre will abort syphilis, and that even when total destruction of the syphilitic virus is not effected, that by removing the mass of infective material contained in the chancre, the severity of its constitutional effects is modified. They assume that the virus remains for a time localized at its point of entrance, and that the

[1] Abstract of a lecture delivered at Charity Hospital, New York, October 31, 1885.

chancre constitutes the infecting source from which contamination of the system gradually takes place.

In discussing the pathology of syphilitic infection, I have already given you my reasons for believing that the chancre is the expression of a generalized blood-poisoning, the evidence of an already accomplished infection; and if this be the case, obviously enough destruction of this lesion, by excision or cauterization, will not arrest or modify the effects of the virus upon the general system.

Without attempting to determine at what precise time generalization of the virus takes place, but leaving all theoretical considerations aside, it may be safely asserted that the value of the abortive method has been settled by the test of clinical experience; the practice of excision of the chancre is condemned by its results. Numerous cases are on record in which the operation has been done under the most favorable conditions, within a few hours after the first appearance of the chancre, and yet constitutional symptoms followed in regular order.

The treatment of the chancre should be mainly expectant. The indications of treatment may be summed up as follows: cleanliness, the removal of local causes of irritation, and a simple protective dressing. When there is a tendency to suppurative action, mild astringents, dusting with iodoform or calomel, or the use of the black wash, may be employed. When the chancre is painful, the use of sedative lotions, as the lead and opium wash, will be found beneficial. Mercurial or other ointments should never be employed, especially when the chancre is situated upon a mucous surface. The voluminous indurations which sometimes remain, even after cicatrization, are removed by the unaided efforts of nature alone; their involution may, however, be hastened by the internal employment of mercury.

The next question which arises in connection with treatment is, whether the internal use of mercury in the primary stage prevents secondary accidents, or materially modifies the subsequent severity of the disease? This may be answered very decidedly in the negative. Mercury does not prevent the development of general symptoms; it may possibly delay secondary manifestations, it may derange the regular order of their appearance, but it does not prevent them.

This leads to a consideration of the proper time for beginning the general treatment of syphilis. Upon this point there is a difference of opinion among authorities. Many recommend the administration of mercury upon the first evidence of induration of the sore; others counsel its delay until after the appearance of secondary accidents. The latter plan is the most judicious. It is not always possible to pronounce with absolute certainty upon the syphilitic character of a venereal sore before secondary symptoms appear. There are so many possible sources of error in forming a diagnosis, that even the most practised physician may be deceived. Unless you have the elements of a positive diagnosis unmistakably present, you may accept it as a safe rule that it is better to defer specific treatment until secondary symptoms have declared themselves.

In the general treatment of syphilis an immense number of drugs, drawn from both the mineral and vegetable kingdoms, have been employed, but of this number only two are regarded as possessing *specific* properties. These two drugs, mercury and iodide of potassium, constitute the basis of all special therapeutical treatment at the present day. It is well, gentlemen, that you should have a definite understanding of what may be accomplished by the specific treatment of syphilis, and while appreciating the full measure of its therapeutic value you should also recognize its limitations.

It can be justly claimed for mercury that it exercises a positive curative action upon the secondary manifestations of syphilis, it abates their intensity, and hastens their involution. In the treatment of the erythematous papular and papulo-pustular eruptions, its action is often prompt and decided, causing a much more speedy disappearance than would have taken place in the natural course of the disease. Mercury also exercises an undoubted influence upon some of the later lesions of syphilis. Iodide of potassium is, however, the remedy *par excellence* for lesions of the tertiary stage, especially those of the gummous type. The rapidity of its action in melting away gummatous deposits, and in arresting ulcerative processes, is often marvellous. Affections of the bones, visceral lesions, etc., also come within the range of its curative action. A combination of these two drugs, constituting the so-called "mixed treatment," is often more efficacious than either alone, especially for the lesions of the intermediary stage.

But while clearly appreciating the *curative* action of these drugs upon specific lesions, we must recognize the fact that their *preventive* action is much less pronounced. Mercury does not prevent the evolution of syphilis; successive crops of secondary accidents continue to recur in patients under the full influence of an active mercurial treatment. We cannot affirm positively that mercury given continuously during the entire secondary stage will prevent the development of tertiary lesions. It is a matter of common observation that many syphilitics who have never taken a grain of mercury or iodide of potassium, never have tertiary lesions. Tertiary manifestations are not a constant or essential feature of syphilis, they occur in only a small proportion of cases whether the syphilis is healed or not healed, so that it becomes difficult to discriminate between the effects of treatment and the self-limitation of the disease. It would hardly seem reasonable, however, to suppose that a drug which is powerless to prevent successive outbreaks of the disease during its active employment, should be able to dominate the diathesis years later, and long after its discontinuance. We may conclude, then, that while mercury is the most efficient agent that medical science has yet discovered in the treatment of syphilis, it does not infallibly cure the diathesis or furnish an absolute safeguard for the future.

There are certain principles pertaining to the use of mercury in the treatment of syphilis, which clinical experience has established as fixed and definite, which I will now endeavor to formulate for your guidance.

Mercury should be given in small doses, and never pushed beyond the production of its primary physiological effects. It is an error to suppose that large doses are necessary to secure the full therapeutic efficacy of the drug. Mercury, judiciously administered in small doses, exercises a decidedly curative action on the secondary manifestations of syphilis, and its continuous and prolonged use may prove inoffensive to the patient. But, when given in doses sufficiently large to produce salivation and other toxic effects, it is positively pernicious. Unfortunately, we are not able to give the exact dosage in all cases, for the reason that susceptibility to the action of mercury varies in different individuals. Its influence upon the eruption and the toleration of the patient's system should be the measure of the dose.

Another point of importance is that mercury should not be given indiscriminately in all cases, irrespective of the condition of the patient's general health. In weak and debilitated patients, in certain cachectic conditions, mercury often does positive harm, and it should be employed with extreme caution. In malignant, precocious syphilis, for example, when the system seems to be saturated with the poison of syphilis, when the disease exhibits itself in its most intense and destructive form, mercurial treatment would only aggravate the condition. In these cases tonics, good food, stimulants, and all measures calculated to promote nutrition should first be employed. After the general health has been built up by reconstituent remedies, and not until then, will the syphilitic manifestations promptly respond to the action of specific treatment.

As regards the activity and duration of specific treatment, we cannot lay down arbitrary rules which shall apply in every case. The two principal plans of admin-

istering mercury in the treatment of syphilis are known as the "tonic treatment," by the continuous use of small doses, and the "intermittent treatment." By the continuous method the dose of mercury is gradually increased until it produces slight salivation, which constitutes the "full" dose. One-half or one-third of this quantity represents the "tonic" dose, which is continued for two or three years, with an occasional resort to the full dose when more active symptoms appear.

By the intermittent plan the effect of the mercury is carried to the point of toleration, and maintained there for two or three months; its use is now intermitted for two months and then recommenced, intermissions alternating with periods of active treatment from two to four years. Both these methods are open to objections. The principal objection to the first is that the continuous, prolonged use of the drug exhausts the patient's susceptibility to its influence; to the second, that the intermission of treatment may coincide with an active outbreak of the disease, when the remedy is most needed.

A broader, and, in my opinion, a much more rational rule, is to regulate the activity and duration of the treatment by the manifestations of the disease; in other words, the treatment should be essentially symptomatic. When manifestations appear, they should be suppressed by specific treatment; when they cease, the treatment should be remitted in activity or substituted by tonics, with a view of counteracting the emaciating and debilitating influence of the diathesis.

Various preparations of mercury are employed in the treatment of syphilis. The drug may be given in the form of metallic mercury or one of its salts. The choice of the preparation and the mode of its introduction into the system are often a matter of choice on the part of the physician. The administration of the drug by the mouth, either in pill form or in solution, is the most convenient and the most generally employed. My own preference is for the protoiodide in the form of pills, each containing one-sixth grain. The quantity of the drug ingested can thus be regulated with precision, and increased or diminished according to its effect upon the disease and the tolerance of the patient's system. If it should produce symptoms of gastro-intestinal irritation which cannot be controlled by combining it with opium, another preparation may be substituted, or the drug may be introduced through the skin. This is the oldest method of employing mercury in the treatment of syphilis, and still retains its popularity with many physicians. When mercury cannot be given by the mouth, the inunction method is no doubt the best substitute. It is also indicated in conjunction with internal treatment when the disease is active, threatening the integrity of important structures, and it becomes necessary to secure the speediest possible effect of mercurial action. For the purposes of inunction blue ointment, the oleate of mercury, or mercurial soap may be employed—the former is undoubtedly the most efficient in its action, although the oleate is the more cleanly and elegant preparation.

Mercury may also be employed by fumigations or mercurial baths, but they are rarely relied upon in the systematic treatment of syphilis. They serve rather as an adjunct to other methods, when it is desirable to obtain prompt and decided effects.

The hypodermatic introduction of mercury is a comparatively recent innovation upon older and established methods. It possesses the advantages of great convenience, combined with scientific accuracy. It is also claimed that the maximum effect of mercury is obtained with the minimum dose, while it produces neither stomachal nor intestinal irritation. It has the counter-balancing disadvantages of causing intense pain, with the occasional production of tumors and abscesses at the seat of puncture. Various preparations of mercury have been employed for subcutaneous injections, as calomel, the bichloride, the bicyanide, sublimate serum, the formamide, the albuminate, the peptonate, the urate of mercury, etc. The proper place of hypodermic medication among our therapeutical resources against syphilis has not been definitely determined. Its disadvantages are such that it will probably never supersede the older and more classic methods.

Toward the close of the secondary stage, and in the intermediary stage, mercury may be advantageously associated with iodide of potassium, the quantity of the iodide varying according to the ulcerative tendency of the lesions. Iodide of potassium finds its special application in the tertiary stage of syphilis. In tuberculo-ulcerous lesions, serpiginous ulcerations, gummatous lesions of the subcutaneous tissues, bones, and internal organs, its curative action is remarkably rapid and efficacious, but it should be understood that, while it causes tertiary lesions rapidly to disappear, it does not prevent reoccurrence.

The local treatment of syphilis has always been regarded as merely accessory to general treatment, but recent experience with the dermic and hypodermic method has shown that mercury directly applied to the seat of syphilitic eruptions exerts a much more rapidly curative action than can be gained from its internal use. The topical use of mercury finds its special application in a late stage, when the eruptive elements are massed or aggregated in limited areas instead of being diffused over the entire surface. The lack of time forbids my considering in detail the local treatment of syphilitic lesions.

It is, of course, gentlemen, not possible within the limits of a single lecture to give more than a mere outline of the treatment of syphilis. We cannot lay down fixed and absolute rules of treatment which shall be adapted to every case. The activity and duration of treatment should be gauged by the intensity, the succession, and the duration of the syphilitic manifestations. Each case should be treated upon its individual merits. Benignity or malignancy of the type of syphilis is the product of peculiarities of individual constitution, and the indications are to treat the patient rather than the disease.

Common observation shows that syphilis is most severe in persons of broken-down constitutions, in persons suffering from privation, want and misery, of intemperate habits, the scorbutic and cachectic, persons in the extremes of life, where vital resistance is feeblest. In view of this fact, I am fully persuaded that the tonic and hygienic treatment of syphilis, embracing all measures calculated to build up and maintain the general health at the highest possible standard, are scarcely subordinate in importance to specific treatment itself. The patient's food should be of the most nutritious character, his surroundings good, his habits regular, overwork and exposure should be avoided, while alcoholic and venereal excesses should be prohibited. In conjunction with specific treatment, or in its intermissions, you should give bitter tonics to improve the appetite, ferruginous and nutritive tonics to invigorate the patient's constitution and increase his powers of resistance.

A Definition of Gout.—At the meeting of the Medical Society of London, on October 26th, Dr. Milner Fothergill read a paper on "The Presumptive Diagnosis of Gout." He described a gouty individual and exhibited casts of gouty teeth and photographs of gouty nails. He said: "When kidneys first appear in the animal kingdom the form of urinary excretion is uric acid. Uric acid belongs to animals with a three-chambered heart and a solid urine (reptiles and birds). The mammalia possess a four-chambered heart and a fluid urine; the form of urinary excretion being the soluble urea. When the human liver becomes depraved or degraded, it has a tendency to form primitive urinary products. To the question, What is gout? the answer is: Gout is hepatic reversion, when primitive urine is formed by a mammalian liver!"

Original Articles.

A CASE OF COCAINE-POISONING SIMULATING OPIUM-POISONING.[1]

By J. S. SPEAR, M.D.,

MEDICAL INSPECTOR, UNITED STATES NAVY.

H. A. G——, private, U. S. Marine Corps, aged twenty-nine, weight, one hundred and forty pounds, general health good, on duty at the United States Marine Barracks in the city of Brooklyn, returned from liberty at 8.30 A.M., October 16th. He was one hour and a half over time, and being slightly under the influence of liquor was confined in a cell with three other prisoners. About 10.45, the same morning, he administered to himself with a hypodermic syringe "a dose to sober up," as he told his fellow-prisoners. He prepared the medicine and syringe himself. One of the men in the cell pinched up the skin of patient's arm for the insertion of the needle. After conversing very sensibly for half an hour without showing any signs of excitement or exhilaration he sat down on the floor with his back against the wall, and soon fell asleep.

At 12.40 P.M. the men in the cell noticed that his face was ashy pale, hands and lips quite blue, and large drops of perspiration covered his forehead and ran down his cheeks. They now became alarmed at his condition, and signalled to the sentry on post for help.

At 12.50 P.M., Mr. Louis, the apothecary of the barracks, reached the cell. He reports that he found the patient sitting on the floor with his back against the wall, and the body inclined to one side at an angle of forty-five degrees, resting on his elbow, head down on his breast, eyelids tightly closed, mouth half open, pupils contracted to a point not larger than the head of a small pin, breathing very slowly; pulse feeble and fluttering and not countable, face congested and of a whitish-gray color, lips and hands quite blue, body bathed in cold perspiration; unable to rouse patient by violent shaking and pinching. Mr. Louis thought the man was dying.

At 1.10 P.M. Dr. Derr, U. S. Navy, arrived. He says the patient was in a comatose condition; face cyanosed and puffy; pupils very much contracted; skin cool and bathed in perspiration; respiration very slow and almost imperceptible, and not at all stertorous; pulse slow and of fair volume. A diagnosis of opium-poisoning was at once made by the doctor. He used the stomach-pump directly, but found the stomach empty. A solution of the sulphate of atropia, one-eightieth of a grain in eight minims of water, was next injected hypodermatically, and strong coffee was forced down the throat and into the stomach by manipulation, patient at this time being quite unable to swallow. Two strong men lifted him on his feet and dragged him along the floor, while another man spanked him on the legs and buttocks. Under this treatment, in the course of an hour and a half, he showed signs of returning consciousness.

After taking coffee several times he finally vomited it. At 3.15 the writer saw the patient. Pupils were still much contracted and not responsive to light; pulse 80, and of fair volume; respirations 9 per minute and not stertorous; could be roused without difficulty, but inclination to go to sleep very marked, and would fall into a profound slumber if let alone for a few seconds; able to stand erect for a short time, but could not walk. Diagnosis concurred in.

At 5 P.M., respirations, 15; pulse, 92; walked alone, but staggered badly; pupils contracted; so much improved that all treatment was discontinued, except the guard was ordered to see he was not permitted to sleep longer than five minutes at a time.

At 8.30 P.M., the writer being present, patient was allowed to sleep one hour undisturbed, At the expiration of that time he was roused without difficulty. His temperature in mouth was 96.7°, and in axilla, 96°; pulse, 84, full and strong; respirations, 14; pupils normal and responsive to the light of a candle. No headache; said he is much fatigued and very sleepy. The following morning this man told me that his occupation is a hospital nurse; that he is addicted to the use of cocaine to allay a craving for alcoholic stimulants; that on the afternoon of October 15th he left the barracks about two o'clock, went directly to the manufacturing laboratory of Dr. Edward R. Squibb, in Brooklyn, purchased two small vials, each containing five grains of muriate of cocaine in powder, dissolved the same by filling the vials with water which he obtained in a bar-room; he then crossed over to New York, had his hypodermic syringe repaired at an instrument-maker's shop, and at about 3.30 P.M. gave himself the first hypodermic of cocaine, probably about one grain.

He had already taken several drinks, and continued to drink from time to time all night, going from one saloon to another. Every few hours he took a hypodermic of cocaine. He thinks he was not intoxicated at any time, is quite sure he did not spill any of his cocaine, but took it all before he returned to the barracks at 8.30 A.M., except the last portion, which he took in the cell as before related.

He declared most positively that he did not purchase nor take any morphia on this occasion, and indeed never took a dose of morphia in his life, and offered to make an affidavit to that effect. There was no evidence of suicidal intent. The purchase of the cocaine was confirmed by inquiry made at Dr. Squibb's laboratory. We were told that the same man had frequently purchased cocaine there before. The two vials with Squibb's cocaine labels on them, both empty, one corked, were found in the cell. Both showed unmistakable signs of having recently contained cocaine and not morphia. His own hypodermic syringe had been used to administer the atropia, so that an examination of its contents for cocaine or morphia was considered unreliable. Lastly, here on the spot I am really at a loss for any motive this man could have had for making a false statement as to the drug he administered to himself in the cell.

Very fortunately the routine of the prison is such that by taking a little trouble we have been able to fix the time of the occurrence of the events above related with a good deal of accuracy.

[1] Published by permission of the Surgeon-General of the Navy.

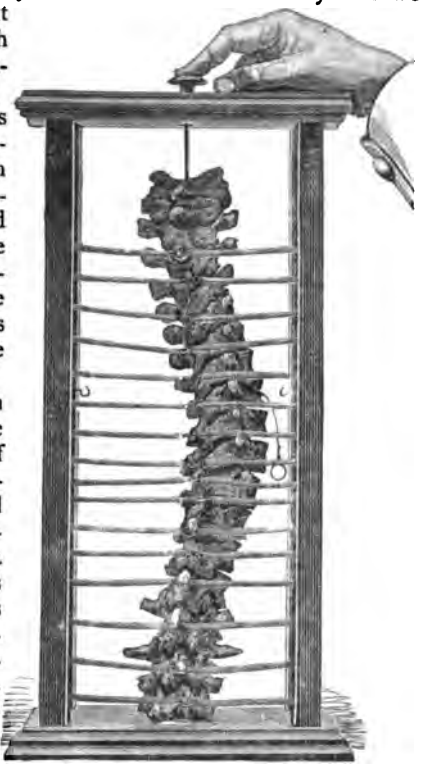
THEORIES OF CHOLERA AMONG THE CHINESE.—In a paper read at one time before the Society of Japanese Studies in Paris, the eminent sinologue, M. Léon de Rosny, related some of the views of cholera as held by the Chinese. The disease is called by the name hoh lwan, meaning the diarrhœa trouble or the quick trouble. Two varieties are recognized, kan hoh lwan, or the dry, and shi hoh lwan, or the moist, cholera. The latter is considered the more grave form. Chinese physicians believe that cholera may be communicated in one of three ways: 1. By proximity or contact with clothing worn by a patient. 2. By breathing air which has passed over cholera dejections. 3. By moist atmosphere during a storm. They say that the stools are never contagious as long as they are exposed to the direct rays of the sun, but that, when preserved in the shade or during the night, they become a source of great danger.

THE MECHANISM OF A LEECH-BITE.—M. Carlet states that the bite of a leech is effected by the three jaws, which bury themselves in the skin by a movement of separation, at the same time opening the œsophagus in the form of a funnel. When the top of this funnel is filled with blood, the jaws close and force the fluid along by a sort of piston movement. He asserts that there are no peristaltic movements of the œsophagus, but that the blood is driven along by the opening and closing of the jaws.

THE TREATMENT OF LATERAL CURVATURE OF THE SPINE.

By A. B. JUDSON, M.D.,
NEW YORK.

If this disease were simply lateral curvature the reduction of the deformity by mechanical means would be easy. Except in extreme cases there is no alteration of the bony tissue, which in Pott's disease prevents restoration of form. If the trunk simply curved laterally it would be comparatively easy to support it laterally in such a manner as to abolish the curvature. But there is an element in this disease which refuses to yield to this simple treatment. I refer to rotation, which is present whenever the spine curves laterally, in health as well as in this disease. But, although constantly present, this element easily escapes detection. It failed entirely of being described till the year 1824. I doubt whether previous to that year there is a single unequivocal reference to it in medical literature. And it is this obscure element that has insidiously thwarted the practitioner of orthopædic surgery in the treatment of the disease. For I suppose it will not be denied that a case of confirmed and well-marked lateral curvature in which the patient has been restored to perfect symmetry would be such a curiosity that we may frankly admit a doubt that such a case has ever existed.



That rotation is the intractable element is clear when we consider attentively the dried specimen or the mounted preparation[1] shown in the cut, which exhibits lateral curvature and rotation.

It is evident from inspection that the anterior portion of the vertebral column has curved more than the posterior portion, a condition of things which constitutes rotation. The anterior part, composed of the vertebræ being within the cavity of the chest, is entirely beyond the reach of direct mechanical impressions. Whatever lateral force is to be used must be applied by way of the ribs to the posterior portion of the column, composed mainly of the vertebral processes. Force thus applied largely tends to increase the rotation without straightening the curvature.

The force here spoken of is directed from the surface of the trunk toward its centre. If we could use a gyratory force, or one which would untwist the vetebral column, our mechanics would indeed take an important step in advance. But this force would have to untwist the column from right to left in one portion, and from left to right in another, for the rotation of the compensating is in a direction opposite that of the primary curve.

I therefore decline, as a rule, to treat lateral curvature with braces. There are exceptions to this, as to every rule. For instance, in some cases, by the use of a brace making antero-posterior pressure, as in Taylor's brace for Pott's disease, it has seemed possible not only to give to the patient the comfortable sensation of being supported, but also to push in the ribs from behind, or the transverse processes in the lumbar region, and thus to oppose rotation. But in general I have obtained good results by the persistent use of special exercises, in which suspension and the production of extreme lordosis when the patient is suspended, and also when lying supine, are the principal features.

[1] Described in the Transactions of the New York Academy of Medicine, 1876, pp. 325-330.

HISTORY OF A CASE OF FOREIGN BODY IN THE THROAT, WITH OPERATION FOR ITS REMOVAL.[1]

By R. F. CHAPMAN, M.D.,
NEW YORK.

At four o'clock on Sunday afternoon, September 27th, a little baby of six months and twenty-seven days was seated on the floor of its home in a large tenement-house, when its mother noticed it put a piece of veal-bone which it had picked up from the floor into its mouth. This provoked a fit of coughing, and the child seemed to be choked, whereupon the mother forced her finger into the child's throat and dislodged the obstacle, and relieved, as she thought, the bad symptoms, for the child remained quite comfortable till nine o'clock that night, when another attack of difficulty from the piece of bone occurring, I was hastily summoned.

On reaching the patient I could not feel satisfied that the piece of bone had lodged in the trachea or œsophagus, for there was no cough, and the breathing only at times seemed to be affected by any obstruction.

Hoping it had entered the stomach-pipe and thereupon be the easier dislodged, I improvised a probang of a whale-bone and a pledget of cotton tied firmly to the end, which I passed into the stomach. For awhile the child seemed much relieved, and I thought there was reason for the hope that the obstruction had been removed. The breathing, however, was of a croupy character, but the child slept some and was generally more quiet. Hoping the difficulty was removed I left the child to the care of its parents, with instructious that if its breathing became labored during the night to call me.

I did not hear from it till next morning at nine, by which time I was quite possessed of the impression that my little patient had gotten over its trouble, when the father came to tell me that the child was worse and refused to nurse. I saw something decided had to be done, and at once determined to see my neighbor, Dr. D. C. Cocks, whom I knew, by oft-repeated experience, would cheerfully give me his skilful assistance, and whose success in tracheotomy made it most fortunate that I had him to call upon.

Dr. Cocks readily consented to see the case with me at once. Upon a most careful examination the foreign body was located in the trachea. An immediate operation was determined upon, and as soon as we could get ready —procure the anæsthetic and suitable instruments—Dr. Cocks proceeded to operate. Dr. G. H. Cocks, who has also had much experience in this operation, kindly assisted. An opening was made into the trachea, midway between the thyroid cartilage and the upper border of the sternum, through which Dr. D. C. Cocks, without the loss of a teaspoonful of blood in making the opening into the trachea, passed a probe, and therewith located the piece of bone just beyond the glottis. After most patient, painstaking, and persistent effort he dislodged the bone and brought it through the glottis into the mouth, greatly to the delight and satisfaction of us all, thus securing the object we were in search of. Dr. Cocks then introduced a single silver tube, the inner one of the ordinary instruments for that purpose, with instructions to clean it out every few minutes with a feather, and to keep a steam atomizer constantly going.

The child breathed quite easily through the artificial

[1] Read before the Harlem Medical Association, October 22, 1885.

opening for about two hours, when shortly after I had left I was hastily called, the father, who came for me, assuring me I would find the patient dead, and begging me not to blame him to his wife and the bystanders who had collected in the room from other apartments in the same house, because he had removed the tube, though he did so by my directions, for they clamorously asserted that by so doing he had killed the child. It was not dead, however, and on my reapplying the tube and clearing out the collected mucus it breathed easily again.

It was very difficult at first to get attendants at all capable of doing what was necessary for the child. Many times it would be almost choked from accumulated mucus. The father and a friend were soon broken in and made very excellent nurses for that service. It was indeed remarkable how many changes were necessary to enable the child to breathe easy, and yet how some little thing would enable it to do so. When it breathed hard with the tube in, taking it out would make it breathe easy, or when the tube was out, putting it in again would have that effect. Keeping the atomizer at work one time would help it, then to stop it would do so.

The morning after the operation Dr. Cocks removed the tube and stopped the tracheal opening with rubber plaster, through the several layers of which the child breathed some, but also through the larynx. It made a cry quite audible and distinct. In a few hours it became necessary to reinsert the tube, and the instructions were to do so every night. This course was pursued each day for one week after the operation, Dr. Cocks closing every morning the opening in the throat with his fingers for a few moments, and then the adhesive plaster, which he instructed should be left on as long as the patient could bear them, to be removed and reapplied till distress of breathing ensued.

All this time the patient did well, having its hard breathing spells, which would be relieved by such attention as experience had taught was required, but it nursed well and slept for hours very peacefully.

One week after the operation the tube was removed and never reinserted. The child would have difficult breathing at times, but then would breathe easily again; but when the atomizer was kept at work, so as to soften the mucus, and the latter constantly removed, and the already trained nurses (for this case at least) took care of it, the child did well. Unfortunately, the father, who had become most efficient, had to go to his work. As his wife expressed it, "he hadn't a bank account," though some days previously he had gone to the bank to draw money to pay his rent, with the assurance, when he left his wife and sick infant, that he would be gone but one hour and a half, and had returned, after an absence of ten hours, with his sorrows completely drowned in libations with a friend he had met down-town; so that a few moments after his return he was oblivious, in the control of alcohol, of his child's condition, and unable to give his assistance, which was so much needed, to saving his little one's life. For four days after the tube was last removed the patient struggled along, having its ups and downs of breathing, but about ninety hours thereafter died from exhaustion.

There is good reason for the opinion that with sufficient relays of competent nurses the result might have been different, for the father, who had become so capable, was worn out by his all-day work, to which he had returned, and was unable to give attention to his child. The other nurse had to attend to her own children, who were suffering from her absence, and whose own household cares had their imperative demands upon her. We sought to obtain the post-mortem trachea for examination, to see how much closed up it was, but were unable to, owing to the opposition of the mother. I learned from this case the difficulties attending the operation of tracheotomy. The doctor who has charge of it is liable to be summoned at any and all times with the startling assertion that his patient will be dead if he is not there in a few moments, and to be detained altogether many hours of the day in order to give his patient breath to live.

I cannot think, then, for any reason as concerns patient or doctor it should be done, unless, as in this case, it is the only chance for life.

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AS TO CARDIAC ASPIRATION.

By W. S. CHEESMAN, M.D.,

Auburn, N. Y.

The publication of Dr. Westbrook's case of abstraction of blood from the right heart (Medical Record, December 23, 1882) started a discussion to which, so far as I am aware, the most recent contributions in the American journals are an article entitled "Note on a Peculiar Form of Pulmonary Congestion, together with a Plea for Cardiac Aspiration," by A. H. P. Leuf, M.D. (*American Journal of the Medical Sciences*, January, 1885), and the editorial notice in The Medical Record of October 31, 1885, of a case of aortic aspiration by Mr. Dacre. By the former the safety of the procedure is vehemently urged; in the latter it is stated that "experience, so far, shows that cardicentesis is not dangerous."

In a brief communication concerning Dr. Westbrook's case (Medical Record, January 20, 1883), I objected to the procedure on the ground of its peril. Dr. Westbrook found a slight hæmopericardium as the result of his needling, and it seemed to me not hypercritical to ask: "Is there no risk in an operation involving such a contingency? Bearing in mind the tensity of the auricular wall, and the danger that it may tear itself by motion against the needle (not a fanciful danger, by any means), can we consider its puncture as other than a most hazardous expedient?" The same objection was urged by the *Medical News*, February 3, 1883. To both of these protests Dr. Leuf replies (*American Journal of the Medical Sciences*) by denying that the auricle can thus tear itself, because *a priori* the auricular walls are elastic, and *de facto*, because, in the single case reported by Dr. Westbrook, no such tear occurred.

Even had this reasoning been more lucid and convincing, my own apprehensions would not have been quieted, founded as they were upon a case observed while I was an *interne* in Bellevue Hospital in 1880. To justify my position in regard to the danger of cardicentesis, I transcribe the history from my old case-book:

Patient, a woman, aged fifty years. Admitted June 8, 1880, suffering intensely from dyspnœa, which being found to depend on double pleural effusion, was relieved by the aspirator. Further examination revealed the existence of Bright's disease.

The patient was aspirated several times, was finally put on dry diet, and the effusion not returning, was discharged on July 9th.

On July 13th she was re-admitted, suffering horribly from dyspnœa, which was, as usual, relieved by aspiration. Repeated pumpings kept the chest empty. Finally, though both pleuræ were free, she passed into collapse, breathing with great exertion, and almost pulseless. Previous experience with double pleurisies had taught the need of watchfulness for the occurrence of pericarditis, and now for the first time evidences of this complication were found. The area of præcordial dulness was much increased, the apex-beat imperceptible. With the concurrence of another member of the house staff, a hypodermic needle was introduced into the space uncovered by lung, it being hoped that if thereby the diagnosis were confirmed, relief might be obtained by pericardial aspiration. The syringe filled with blood, and was at once withdrawn. While being withdrawn, the needle was distinctly felt to be moved with or against the heart in its contraction.

The patient seemed no worse for this exploration, lived six hours, and died very gradually.

Autopsy.—Head: Brain and membranes œdematous; atheroma of the vessels. Chest: Double pleurisy; considerable exudation of lymph; scanty serous effusion; parenchyma of lungs normal. On slitting open the pericardium its cavity was found filled with clotted blood, which enveloped the heart like a bag. Clearing this away the heart was found hypertrophied, weight sixteen and a half ounces. Left ventricular wall one and a half inch thick. The right ventricular wall was also thickened; but in one spot, between the columnæ carneæ, it happened to be excessively thin, seeming little thicker than the visceral pericardium itself. And just here a rent one-fourth of an inch long was found, allowing of communication between the right ventricle and the pericardial cavity. Heart-walls fatty in places; atheroma of aorta. Abdomen: Liver, spleen, and intestines normal; kidneys very fibrous and small, together weighing only four ounces.

In this case dilatation of the heart had beyond doubt been mistaken for pericardial effusion, and the right ventricle lacerated by the hypodermic needle; and, while before exploration the case was certain to end fatally, it is equally certain that had there been any chance of recovery that chance would have been destroyed.

Subsequent discussion of the case by the house staff elicited the interesting though unpublished fact that precisely the same error, with the same lamentable result, had been made not long before by a distinguished member of the visiting staff, except that in his case the needle had torn the right auricular instead of the right ventricular wall.

With these cases in mind I must beseech the indulgent forbearance of the advocates of cardicentesis, when I confess to being frightened by the three or four ounces of "thin serous fluid of a dark claret color" and clots found in the pericardium in Dr. Westbrook's case, or the two ounces of blood found in Mr. Dacre's. In themselves these are little or nothing. But they mean leakage, hæmopericardium, which in some other case may be sufficiently abundant to kill.

I have before (in the communication above referred to) expressed my conviction that ordinary phlebotomy is far safer and equally efficient. Drs. Westbrook and Leuf deny that bleeding from a vein is an equivalent for cardi centesis. Dr. Leuf actually asserts that this latter is simpler, and requires paraphernalia less disheartening to the patient. But it will probably be difficult to prove these propositions to the satisfaction of a cautious medical public.

One other point has been made much of by Dr. Leuf (in his article above referred to), viz., that the conception of this operation was original with Dr. Westbrook. In this he was probably misled by Dr. Westbrook's own statement (MEDICAL RECORD, December 23, 1882): "About a year ago (*i.e.*, sometime in 1881) *it occurred to me* that in a case of very acute and intense pulmonary congestion, with over-distention of the right side of the heart, it would be practicable" to aspirate the auricle. It is a familiar fact that an ingenious mind may work out for itself by independent research inventions by no means new. Every now and then operations are advocated and credited as novel, till some bibliomaniac arises to show that Hippocrates or Avicenna practised them. I do not question Dr. Westbrook's honesty when he claims to have originated cardiac aspiration, but I cannot see how Dr. Leuf can continue to deceive himself in regard thereto. He himself quotes Roger's cardicentesis, which was performed, I believe, in 1872—ten years before Westbrook's and Hulke's, which also preceded Westbrook's. He examines critically Dr. C. L. Dana's cases[1] (MEDICAL RECORD, February 3, 1883), of which one occurred in 1877, and the other in 1878. In November, 1881, Dr. Corwin (MEDICAL RECORD, March 10, 1883) punctured the right ventricle of a dilated heart, mistaken for a case of hydropericardium, and drew off blood. He farther states that during his house service he "saw and performed cardiac aspiration a number of times."

I hesitate to incur the opprobrium of "opposing original thought by iconoclastic criticism" (Dr. Leuf), but in view of these few facts, which, for aught I know, might be multiplied by farther search, I must ask Dr. Leuf why he terms cardicentesis "Westbrook's operation?" It might also be not improper for Dr. Westbrook to explain why he continues to permit this operation to be so named.

[1] It will interest Dr. Leuf, but probably nobody else, to know that these were the cases of cardiac aspiration alluded to in my communication of January 20, 1883.

ABNORMAL MOBILITY OF THE TONGUE, WITH ABILITY TO PROJECT INTO THE NASO-PHARYNX.

BY LOUIS JURIST, M.D.,

LECTURER ON RHINOLOGY AND LARYNGOLOGY, JEFFERSON MEDICAL COLLEGE, PHILADELPHIA.

THOS. P——, aged twenty-one, syphilitic, was referred to the Throat Department from the Surgical Dispensary of the Jefferson Medical College Hospital for examination. He had suffered for thirteen years with chronic rhino-pharyngitis, and had been much annoyed by the accumulation and desiccation of mucus in the naso-pharyngeal cavity and on the posterior wall of the pharynx. He often examined his throat with the aid of a hand-glass, and two years ago succeeded, after two months' practice, in reaching his pharynx with the tip of his tongue and removing the masses of secretion. This procedure now became a source of much comfort, and was indulged in daily. On one occasion his tongue slipped into the pharyngeal vault, and gave him still better facilities for cleansing. Upon examination, the evidence of an ordinary inflammation of the turbinated tissues, with hypertrophy and subsequent pharyngitis, was well marked. He could with the greatest ease, and many times in succession, project the tip of his tongue into the vault, and described fairly well the posterior extremities of the inferior turbinated bones, the posterior septum, etc. A probe passed through the inferior meatus was readily and freely moved.

The frænum linguæ was ruptured in three or four places, and he stated that the under surface frequently felt sore, and that he often heard "cracking" while practising. His tongue, rather pointed, was not of unusual length. Nothing abnormal in the conformation of the naso- or oropharynx could be detected. As far as I have been able to discover, but three similar cases are on record. In Dr. G. F. Whitney's case (MEDICAL RECORD, April 28, 1883) the frænum "was merely represented by a lax fold of mucous membrane;" in Dr. Webster's own person (MEDICAL RECORD, May 26, 1883) the frænum had never been cut, but the power acquired with difficulty; in Dr. J. O. Roe's patient (MEDICAL RECORD, June 9, 1883) "the frænum linguæ was well marked, though a little more lax than usual." Dr. E. Fletcher Ingals, of Chicago, informed me by letter that he had seen one case, but furnished no details.

Curiously enough, the faculty has so far been observed only in males!

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VICARIOUS MENSTRUATION.—Puech, in his collection of over two hundred cases of vicarious menstruation, gathered from different authors, sums up his statistics as follows: Menstruation at roots of hair, 6 cases; by auditory canal, 6; by lachrymal ducts, 10; by nose, 18; by gums, 10; by cheeks, 3; by mouth, 4; by bronchial tubes, 24; from stomach, 32; by the breast, 25; by the axilla, 10; by the umbilicus, 5; by the bladder, 8; by the bowels, 10; by the hands, 7; by the lower limbs, 13; by various regions, 8. In young girls subject to vicarious menstruation the genitals are always moist with a muco-sanguinolent matter at the time of their courses. —*Cincinnati Lancet*, October 3, 1885.

Clinical Department.

PLACENTA TWO MONTHS IN ADVANCE OF FŒTUS.

Dr. Wm. H. Lathrop, of Lowell, Mass., relates a case of miscarriage in which the delivery of the placenta preceded that of the fœtus by two months. The young woman, married, primipara, had been pregnant four months when the placenta was delivered. Two weeks afterward she went to her work in a mill, and so continued till within two days of the delivery of the fœtus. She was conscious of the presence of something in the womb, but it occasioned no inconvenience, and had no odor. She menstruated regularly, and at the second menstruation the fœtus came away. This was March 7, 1885. This occurred in the practice of another physician, and the facts are well authenticated. It was a four-months fœtus, and remained two months in the womb after its death.

INTESTINAL OBSTRUCTION; ACUTE PERITONITIS; OVARIOTOMY; RECOVERY.

Dr. J. W. Lilly, of Pomeroy, O., writes: "On August 12, 1885, was called to see Mrs. B——, married, thirty-four years of age, and the mother of five children. She was suffering from pain in the abdomen, which was enlarged and tympanitic above umbilicus, and dull below and slightly tender on pressure. The bowels were constipated, and symptoms seemed to indicate simply some slight inflammatory bowel trouble; the usual remedies were prescribed, and the patient was apparently better and able to attend to her household duties by August 20th. She said the pain began suddenly while she was lifting her two babies, twins, from the floor.

"On August 22d I was sent for in great haste, and found patient in bed and vomiting. Examination showed the abdomen enlarged considerably, tender on pressure, dull at lower part, and tympanitic above. I diagnosed peritonitis, with some form of tumor in the lower part of the abdominal cavity, and gave minute doses of calomel, ordering an enema of warm soapsuds; these remedies relieved the nausea somewhat.

"The following day the patient was vomiting again, the bowels had not moved, and there was increased pain and tenderness over the whole abdomen. Dr. Relnu was now called in consultation. We decided the trouble was peritonitis, from some form of obstruction of bowel, and ordered an enema of tobacco infusion with milk and absolute rest, and gave one-half grain of morphia hypodermically. This treatment seemed to give relief, as quite a quantity of scybala came away, and the patient then slept for some time.

"However, at night she commenced to vomit again, and toward morning it became stercoraceous. The case was becoming desperate, but I determined to make one more effort to relieve the obstruction, and with this object injected one quart of milk with an ounce of castor-oil and five grains of podophyllum, and gave two drachms of calomel by the mouth. The enema passed away without effect, and the calomel was rejected in a short time.

"On August 25th a consultation was held with Dr. C. R. Reed, and it was decided to operate. The patient, who had by this time gone into a state of collapse with a thready pulse, 160 to the minute, was anæsthetized with the mixture of alcohol, chloroform, and ether.

"The abdomen was washed with carbolized water; then an exploratory incision was made about half-way between pubis and umbilicus in median line. We discovered the intestines intensely congested and much distended with gas; there was general peritonitis, and we found also a new growth extending from the pelvis to within an inch of the umbilicus. The incision was enlarged to six inches, when this body was seen to be an ovarian tumor. Farther examination showed it to be bound down by firm adhesions, one of which caused the intestinal obstruction. The tumor, which was between six and seven inches in diameter, was, after considerable difficulty, torn loose from its attachments.

"Antiseptic precautions were used as far as possible. Before the tumor was opened at all, the abdominal cavity was thoroughly sponged with carbolized water, and I think if this were always done in this operation there would be less danger from the escape of the fluid into the abdominal cavity (as happened in this case), for it would be neutralized by the antiseptic. Not being prepared to operate for the ovarian tumor, we were obliged to do the best we could with the instruments which we had on hand.

"After the attachments were torn loose, it was found that the pedicle was too short to allow the tumor to be lifted out of the abdomen; but, raising it up as far as possible, and holding the abdominal walls against it, we made an incision and inserted an English catheter into the tumor. The fluid was, however, too thick to flow through the catheter, so it was squeezed out into a vessel placed between the patient's legs. When the tumor was thoroughly emptied of its contents, the pedicle was transfixed and tied with aseptic silk, the tumor cut off, and the ligatures left long enough to extend through wound.

"The abdominal toilet was carefully made, intestines returned to place, and the edges of wound brought together with seven deep sutures. An antiseptic dressing was applied and left undisturbed for three days. The patient rallied well and continued to improve steadily until September 2d when a sudden change occurred in the weather and she was taken with capillary bronchitis. There was great depression followed by rise in temperature and pulse. The symptoms were treated as they arose, and in a few days the patient began to improve again, and from this time went on, with only occasional periods of depression, to complete recovery."

GONORRHŒA IN THE YOUNG.

Dr. M. E. Poynter, of Midway, Ky., writes: "The Record for August 15th contains the report of a case, by Dr. Ward, of Greensboro, Ala., concerning a negro boy, seven years of age, having gonorrhœa. The doctor asks if any one had ever seen that disease in one so young. In 1878 or 1879 I had two cases younger, one a boy of three, and a girl five years of age, white, brother and sister. They had a colored nurse, a girl sixteen or seventeen years of age, who was found to have given the disease to the children. It was detected in both the children at about the same time, and I was called to see them, and at once detected the nature of the disease and so announced to the shocked and overwhelmed parents. The girl acknowledged that she had produced erection in the little three-years-old boy by manual manipulation, and then had him *res in re* with herself. Of course she communicated the disease to him, and, by making the little sister submit to the same process of attempted copulation with the boy baby, she was in turn inoculated. Two years afterward the little boy suffered most intensely from stricture, and had to be treated with dilators, etc."

Dr. J. H. Arton, of Winnipeg, sends us the following: "I have much pleasure in beating the record of your correspondent *re* on 'Early Gonorrhœa.' While in Philadelphia, in 1876, during the last weeks of the Centennial Exhibition, I attended a clinic held by the late Professor Gross. One of the cases was that of a boy, four years of age, with a specific urethritis derived from a girl of sixteen or seventeen, who had charge of him. Professor Gross made the diagnosis, and naturally remarked at the time on its uniqueness."

TROUSERS ON THE SPLEEN.

Dr. W. H. Mather, of Suffield, Conn., reports the following remarkable case: On September 29th, W. C——, a farmer thirty years of age, was trying to jump from a scaffold eight feet high, using his pitchfork to aid him in the descent. The fork slipped, however, and the handle struck him squarely between the legs, tearing the scrotum almost completely away and exposing the testicles. In addition to this, the patient complained of excruciating pain in the left side between the crest of the ilium and the ribs, and the tenderness was so exquisite that it was impossible to palpate this spot without an anæsthetic. The scrotal wound was washed with a sublimate solution and the edges approximated by six sutures, and hot compresses were applied to the side. On the fourth day after the injury one pint of pus was discharged from the scrotum. The pain in the side continued in all its original severity, and on the tenth day an opening was made which gave exit to another pint of pus. Ten days later another incision was made and a little more pus evacuated. There was no diminution in the pain, however. On the twenty-fifth day after the receipt of the injury the patient was chloroformed, and a thorough exploration of the side made through the last-formed opening. This resulted in the extraction of a piece of cloth four inches long, one and one-half inches wide at the base, and one-half inch at the apex. It was a triangular piece which had been inserted in the crotch of the patient's trousers, and which would seem to have been pushed up by the fork. There was no appearance of a foreign substance in the scrotum when it was stitched up, nor was there any blood to be seen on the handle of the pitchfork. After the removal of this cloth the pain disappeared, and the patient made a rapid recovery.

UNREDUCED DISLOCATION OF THE FINGER AND OTHER INJURIES.

Dr. James O. Whitney, of Pawtucket, R. I., reports the case of a man who, when in the army near Charleston, in March, 1864, was struck in the abdomen by a falling log and thrown backward, striking his pronated left hand. He sustained a Colles fracture of the wrist and a dislocation of the ring finger at the metacarpo-phalangeal joint, the head of the phalanx being thrown into the palm, where it now remains partly absorbed. The finger is three-eighths of an inch short, and the deformity and disability resulting from the fracture of the wrist are very great. Soon after this accident he discovered that he had a hernia, and this is now very large and practically irreducible. He said also that he was always lame in the right side, and some seven years ago a tumefaction appeared a little outside of the right nipple, pus was discharged, and the cicatrix even now breaks at times and exudes a little watery fluid. Some time later a second abscess formed four inches lower down and was opened. The man had always been strong and robust previous to entering the army, and never received any injury except the one above mentioned, to which it would appear that all his subsequent ills should be referred.

COCAINE AS AN ANÆSTHETIC IN FRACTURE.

Dr. J. R. Conway, Jr., of No. 14 Lexington Avenue, writes: "Having read with great interest Dr. M. Josiah Roberts' recent article on the use of cocaine in bone surgery, it occurred to me that it would be equally applicable for the painless examination and reduction of fractures. The first case in which I had an opportunity to use it was that of a painter, who had fallen a distance of thirty feet to the ground, striking upon his right buttock and the palmar surface of the right hand. The right radius was fractured about three-fourths of an inch from the lower extremity of the bone, and the lower fragment was displaced backward upon the upper one and firmly held in that position. All attempts at examination of the fracture caused him great agony, and I resolved to try if deep injections of cocaine at the point of fracture would sufficiently anæsthetize the parts to allow of thorough examination and reduction of the deformity without causing him pain. I proceeded to inject five minims of the four per cent. solution into the inner, outer, and posterior surfaces of the forearm directly over the seat of fracture and as deep as the bone. In five minutes the fracture could be thoroughly examined and even roughly handled without the patient experiencing the slightest pain. After the examination I reduced the deformity by extreme extension of the wrist-joint together with traction, using considerable force, but without causing the patient any uncomfortable sensations."

Progress of Medical Science.

Resorcine in the Treatment of Diarrhœa.—In septic diarrhœa, either acute or chronic, characterized by dejections of a fetid odor, and by the presence in the fœcal matters of a large number of micro-organisms, M. Bogouche has obtained excellent results with resorcine dissolved in castor-oil (*Journal de Médecine de Bruxelles*, September, 1885). When thus prepared, the resorcine never causes ringing in the ears, profuse sweats, or other unpleasant symptoms sometimes noted when the drug is given alone, a difference in action which the author explains by the more gradual absorption of the oily solution. For an adult the author gives fifteen grains of resorcine dissolved in about five ounces of warmed castor-oil. To children of about four years of age he gives from three-fourths to one grain in a corresponding quantity of oil. M. Bogouche has met with so great a measure of success in the treatment of fetid diarrhœa by this method that he is encouraged to hope much from it in cholera. In this disease he recommends a mixture of salicylic acid and resorcine dissolved in castor-oil. The dose given by the author, one gramme of resorcine to one hundred and fifty grammes of castor-oil, seems rather excessive, and is probably intended, though it is not so stated, to be given in divided doses during the day.

Thomsen's Disease.—The two following cases of Thomsen's disease are reported by Professor Bernhardt, in the *Centralblatt für Nervenheilkunde*, No. 6, 1885. The patients, brother and sister, aged respectively sixteen and a half and eighteen years, say that the disease began in the lower extremities at the age of four or five years. In the case of the boy it has spread to other muscles, but the sister has retained fairly normal power of movement of the upper extremities. After a good night's rest she does not feel stiff, can leave her bed without difficulty, but on moving about much she experiences the characteristic symptoms of the disease. After sitting quietly for some time she becomes stiff the moment she again stands, and would fall if touched even lightly. The first few steps taken are stiff and awkward. Close attention paid by her to her movements and the exercise of an effort of will result in a partial control of the stiffness and render locomotion less difficult. Her other muscles are all well developed. The brother, a strong man, with athletic development of muscles of arms and legs, shows the typical symptoms of the disease. The parents of these patients were cousins, as were also the grandparents. One of the father's sisters was similarly affected; another sister married a cousin, and both of the children resulting from this marriage have the disease. Farther, the son has married a cousin, and their child, a boy of four or five years, now shows the first symptoms of the disease. Professor Erb, of Heidelberg (*Neur. Centralblatt*, No. 13, 1885), says: "Clinical observation of the motor nervous systems and muscles of three brothers, aged about four-

teen or fifteen years, who were affected with this disease, have shown that we have in reality to do with an abnormality in the form of the contraction of the muscles, and the prolonged latent period and the continuance of the contraction are characteristic. This 'myotonic contraction' can be overcome by *direct* action on the muscles (mechanical, faradic, or galvanic irritation), or through the nervous system, only when a series of rapidly accumulating irritants, such as voluntary action, secondary faradic currents, or liable galvanic current, act on the nerves." He designates under the name "myotonic electric reaction" the changes in electric excitability, which, in a characteristic way, differentiate this condition from that of degeneration, of tetany, of muscular hypertrophy, etc. The examination of a piece of muscle excised from the biceps showed considerable hypertrophy. The diameter of the muscular fibre varied from 24 to 180 μ (normal 25 to 65 μ). More than 50 per cent. of the fibres were from 80 to 140 μ in breadth, while only 2 per cent. were under 40 μ, and 8 per cent. were over 140 μ. On measuring, for purposes of comparison, the biceps of a patient in good condition, who had died of an acute disease, the extreme limits of breadth were 12 and 80 μ, 62 per cent. between 20 and 60 μ, 7.5 per cent. under 20 μ, and no fibres above 80 μ. The fibres are of more rounded form, the angles being rounded off, and they are not pressed together in polygonal forms, as in the case of normal muscle. Erb also found that the nuclei of the sarcolemma were much increased in number, viz., 65, as compared with 18. The transverse striæ were very fine, often somewhat indistinct. The author expressly warns against attaching too much value, at any rate prematurely, to the above abnormalities as supporting a theory of a myopathic origin of the disease.

Dentist's Leg.—A peculiar sensation of numbness, or "pins and needles," in the extremities is frequently experienced by dentists. This condition Dr. George Johnson considers to be due to the combined influence of perverted nerve-function, directly due to a mechanical impediment to the circulation through the rigidly contracted muscles and their associated nerves, and to direct compression of the nerves by the firmly contracted muscles. This combination is found in dentists who stand fixed and firm in one position for long periods of time. The obvious means of prevention and of cure consist in rest for the overstrained limb, or such a frequent change of position as is equivalent to a certain amount of rest. Standing in one position is notoriously more fatiguing than walking, and for the obvious reason that while in standing one set of muscles is in a constant state of active contraction, the circulation through them being thereby retarded and enfeebled, walking involves alternate contraction and relaxation of the muscles, with an invigorated and quickened circulation.—*The Lancet.*

Local Asphyxia and Symmetrical Gangrene of the Extremities.—It will be remembered that Verneuil and Petit have recently given considerable attention to the peculiar condition of local asphyxia of the extremities and symmetrical gangrene. Their belief that paludal poisoning and consequent cachexia play an important rôle in the etiology of the affection appears to be borne out by other cases recently reported. Dr. Giovani (*Giorn. Ital. delle Malatt. Ven. e Cut.*) has had under his observation a patient who, after having lost five brothers and sisters from some unknown disease, remained well himself until the age of twenty-five. At that time he appears to have acquired syphilis. Pains in the bones persisting after the other symptoms had disappeared, he applied for treatment at the venereal clinic, and was given vapor baths and mercurial frictions. Somewhat later the patient had an attack of paludal fever, and was only cured after six months' treatment with sulphate of quinine. Following this came circulatory troubles; he began to experience, among other things, an unaccustomed sensation of coldness over the phalanges of some of the fingers. The sensibility of the hand became blunted. The same conditions were noted by the patient in regard to the toes. Violent pains, increased by pressure, now made their appearance. The color of the integuments affected was modified. The parts which were at first pale became of a dark red color. Flexion and extension were impeded; the epidermis was thickened and wrinkled over the index of the left hand, and gradually became detached in large flakes, whereupon the pain ceased in this finger. Suppuration began about the nail of the right index finger; the pus burrowed to the exterior through the epidermis of the pulp of the finger. Professor Gamberini made the diagnosis of symmetrical gangrene of reflex origin. After several months of symptomatic treatment cicatrization was complete, but some torpor remained in the extremity of the fingers. Bouveret published, in the *Lyon Médical*, June 8, 1884, the following case: "The patient, a woman aged sixty-eight, resides in a country where ague is endemic, and has suffered repeatedly from it. She has also had atheroma of the arteries. In January, 1883, the middle finger of the right hand became cold and of a dark color. Some time later the other fingers of the same hand were similarly affected. The disease gradually progressed until all the fingers and toes, as well as the palms and backs of the hands, became at times cold and blue. Purple patches appear now and then on the forearms. There is diminished sensibility of the affected parts, and at times sensation appears quite abolished. Dipping the extremities into warm water causes a temporary disappearance of the symptoms." It appears probable that in this case, as well as in that of Dr. Giovani, the malarial fever which preceded the local manifestations was an etiological factor. The subject is an interesting one, and undoubtedly many cases similar to those here given could be made clear by the discovery of this malarial origin.

Effects of Zymotic Diseases on the Teeth.—In the *Independent Practitioner* for September, 1885, Dr. F. S. Whitslar thus concludes a paper on this subject: "Now, what are the effects of zymotic diseases upon teeth which bear none of the marks of partial development? We answer, that all febrile conditions or diseases predispose teeth to decay, first, by diminishing vitality, second, by changing the secretions of the mouth so that they act injuriously upon the teeth. In dyspepsia we have not only the predisposing but also the exciting causes of decay, as it not only impairs vitality but prepares in the stomach an acid that is continually being thrown upon the teeth, which acts upon them with great energy. I need scarcely say that residence for any great length of time in miasmatic regions, inducing unfavorable conditions, institutes a predisposing cause, and, in brief, all epidemic, endemic, dietetic, and enthetic diseases derange the functions of the body, vitiate the secretions, impair the vitality, and may be classed as predisposing causes of decay."

Scalded Oatmeal in the After-treatment of Scarlet Fever.—Dr. George Smith, in the *Bristol Medico-Chirurgical Journal*, treats of the subject of the desquamation which follows every case of scarlet fever, however slight, both in regard to its bearings on the patient himself, and also those with whom many cast-off particles may come into contact. The process of desquamation varies very much in different individuals, and sometimes it is done by particles so fine as to be hardly perceptible. And these are, he thinks, a very frequent and most certain source of contagion, by means of clothes and otherwise; much more so, indeed, than the scales as ordinarily thrown off. It is within his own knowledge that the contagion has been thus carried from one house to another, more than a hundred miles apart, at the end of at least a year from the attack. Now, to obviate this danger, he has for several years been in the habit of

having his patients sponged over the whole surface of their bodies twice a day—commencing, as a rule, about a week from the appearance of the eruption, and continuing the process until the desquamation is complete—with a mixture of one ounce of oatmeal to one pint of boiling water; the solution is to be made fresh every day, and used tepid, or at such a temperature as may be comfortably borne by the back of a finger. His reason for using this particular combination is, that the gluten in it sticks the scales to each other and to the surface of the body, thus allowing of their being removed from one sponging to another, without the ordinary risk of infecting either atmosphere or clothes, and greatly lessening the risk of spreading the disease. Secondly, this same gluten fills up the cracks of the new skin and protects it from cold, as, patch after patch, it becomes bare, and thus, to say the least, greatly lessens the risk of the dropsy which so often follows upon this disease.

A New Physical Sign of Tricuspid Regurgitation.—Dr. W. Pasteur, of the Middlesex Hospital, London, writes as follows: "In several cases in which there was reason to suspect functional incompetence of the tricuspid valve which have recently come under my observation, a physical sign has been present to which I believe attention has not been drawn, and of which I have been unable to find any mention either in the standard text-books or in the best known monographs on the subject of cardiac disease. This sign consists in a distention—with or without pulsation—of the superficial veins of the neck, occurring when firm pressure is exerted over the liver in the direction of the spinal column, and independent of the movements of respiration. A little consideration of the anatomical relations of the parts concerned will suggest the facility with which an impediment may be created to the flow of blood, in either direction, through the vena cava inferior by such a manœuvre, especially when the liver is obviously enlarged. It seems to me that the state thus produced is virtually that which obtains as a chronic condition in long-standing and severe cases of tricuspid incompetence as far as regards the tension in the systemic venous system in the immediate vicinity of the heart. Assuming the existence of tricuspid regurgitation and of a source of compression of the vena cava inferior, it is obvious that with each systole an excessive reflux of blood must take place into the vena cava superior and its tributary veins. It may be noted that the question of pulsation, as compared with distention or undulation, is merely one of degree of morbid venous tension. Although the number of cases in which I have observed this phenomenon is certainly limited, I have never failed to elicit it when there was indubitable evidence of tricuspid incompetence; on the other hand, I have hitherto invariably failed to obtain it in other forms of cardiac valvular disease, and in various cases of hepatic enlargement from causes other than passive congestion. I cannot but think that this sign may furnish an important aid to diagnosis in cases where the usual signs of tricuspid regurgitation are ill-developed or in abeyance, and that it may prove a valuable factor in the difficult general problem of prognosis in cases of cardiac disease."—*The Lancet.*

Foreign Bodies in the Urethra.—A great variety of objects have been found at different times in the male urethra requiring surgical procedure for their removal. Among the more common articles intentionally or accidentally lodged in the canal may be mentioned pieces of wood, bits of straw, pipe-stems, pencils, pins, needles, and hair-pins. Pearls, medals, and other curious objects have occasionally been met with. The surgeon is at times called upon to extract the broken end of a catheter, or to remove fragments of calculi. In July last a patient entered the Charité Hospital, in Paris, who had introduced a birch-stem into his urethra three days before, which had broken, leaving a piece nearly two inches in length in the canal. To recover the missing portion he had improvised an instrument from a similar stick, in the end of which he had fastened a bent pin. With this primitive instrument he made diligent search along the canal, but, to his amazement and disgust, he found upon its withdrawal that not only had he failed to catch the stem, but that his hook was gone. Examination with the sound showed the pin to be lodged in the bulbous portion of the urethra. Farther exploration was not attempted. To calm the patient's excitement and overcome the sympathetic vomiting which existed, he was put at rest and given a daily hot bath for three days. He was then placed in the lithotomy position, chloroform was given, and Dr. Després performed external urethrotomy at the point opposite the implanted pin. The index finger was introduced, the pin found, and extracted with forceps. The lithotrity forceps were now introduced through the perineal opening into the bladder, as the wood had not been found in the urethra. All attempts to find the object of the search were in vain. It was presumed that it had been softened, and gave the same sensation, when grasped between the blades of the instrument, as the mucous lining of the bladder. The wound had healed at the date of writing, leaving a fistulous opening through which urine had ceased to flow. It was expected that the wood would soften, and be passed in small pieces with the urine, or would become the nucleus of a calculus. In the latter event Dr. Després proposes to perform a lithotrity, such as he describes (*Gazette des Hôpitaux*, 1879, p. 41) in a case where a piece of a sound had broken off in the bladder and become incrusted.—*Gazette des Hôpitaux*, October 1, 1885.

Iodide of Potassium in Habitual Abortion.—M. Goshkevich says that, though it is usually believed that iodide of potassium tends to produce abortion, and its use is, therefore, generally avoided in pregnancy, he advises that it should be given in cases of habitual abortion. The causes of this are obscure, but the best known of them is undoubtedly syphilis. With this in view, he prescribes the iodide even when no syphilitic symptoms have been recognized, and gives two cases to prove the advantage of this. The heart-sounds and movements of the fœtus, both of which had become almost imperceptible, improved under five grains three times a day, and diminished whenever the medicine was stopped. In each case the normal period was completed, though previously both the patients had been accustomed to miscarry during the second half of pregnancy.—*The Lancet.*

Cocaine in Litholapaxy.—Professor Bruns reports a case in which he obtained local anæsthesia of the bladder and urethra by injecting a cocaine solution, with the most gratifying result. The patient, a young man, had suffered for four years from stone in the bladder. Chronic cystitis was present, and evening feverishness. The injection of one gramme (mostly into the bladder itself, in a two per cent. solution, but also a little into the urethra) produced complete local anæsthesia for half an hour, during which time a very hard oxalate of lime calculus was thoroughly crushed, and removed without pain. After the injection, the patient assumed a different position, to bring the fluid into contact with the whole inside of the bladder; and after the operation, a little of a ten per cent. of iodoform-glycerine emulsion was injected. The recovery was uninterrupted.—*British Medical Journal.*

A New Styptic.—The Berlin correspondent of *The Lancet* writes that some time ago a French physician, Dr. Mennier, reported that a priest, who frequently suffered from bleeding at the nose, having been attacked by a fit of such hemorrhage lasting for nine hours, had, after trying unavailingly all possible remedies, at last stopped it by drinking an infusion of the common nettle, urtica dioica. Thereupon Dr. Rothe made some experiments with the external application of the juice of the said plant. Young plants gathered in spring were cut up (stalks, leaves, and blossoms), macerated for a week in

alcohol of sixty per cent., pressed out, and filtered. It was then a dark greenish-brown fluid of aromatic smell and taste. Applied by means of cotton-wool to bleeding wounds, it promptly arrested hemorrhage, unless large vessels were affected, especially parenchymatous bleedings and those from smaller blood-vessels. The blood was converted into a soft, consistent, but not crumbling clot, which seemingly protruded into the opening of the wounded vessels, thus arresting hemorrhage. In cases of bleeding from the nose, a small cotton plug steeped in the liquid is pushed up the nostril high enough to come into close contact with the bleeding surface, and then, if necessary, fixed by means of a dry plug. Should the hemorrhage cease immediately, the plug may be cautiously moved after the lapse of about ten minutes. If some blood oozes out through the plug, it will have to be replaced by a fresh one. In several hundred cases thus treated the bleeding was always arrested within half an hour at the very latest. Quite striking was the effect in the case of a young man bleeding from the lower jaw, after extraction of a molar; for the hemorrhage had lasted for three days incessantly, in spite of compression and the application of external and internal styptics. For years Dr. [illegible]the has used this "liquor hæmostaticus" in all operations with predominantly parenchymatous hemorrhage, as in herniotomy, tracheotomy, smaller amputations, splitting of the cervix uteri, etc., in the same way as the solution of sesquichloride of iron was formerly employed, but with the great advantage that the blood-clots did not so easily crumble and decompose. The nettle solution has, on the contrary, on account of its alcoholic component, antiseptic qualities; and it is especially indicated in simple cuts of the skin not requiring suture; for not only will the bleeding promptly cease, but by the application of cotton-wool steeped in this solution the wound will speedily heal. The superiority of this new styptic is, above all, evident in non-puerperal hemorrhage from the mucous membrane of the uterus. If, as is generally the rule in cases of mucous polypus and endometritis hemorrhagica, the orifice of the uterus is sufficiently wide open, an injection of from five to ten grammes of the liquor, after previous cleansing with a cold or warm solution of carbolic acid, will produce a permanent stopping of the hemorrhage, except where the mucous membrane is too much degenerated. Should the removal of an excrescence by operation or scraping (with the blunt curette) become necessary, the wound can be cleansed with a warm solution of carbolic acid, whereupon a plug of cotton-wool steeped in the nettle infusion, with subsequent injection of the same, will, in nearly every case, produce the speedy cessation of the hemorrhage.

THE TREATMENT OF PATIENTS AFFECTED WITH DISEASE OF THE PROSTATE.—In a communication to the *Annales des Maladies des Organes Genito-urinaires*, Dr. Guyon formulates the following rules of treatment for the affection: 1. The avoidance of all causes of general or local chill. 2. The proscription of over-eating and alcoholic excess, and in general avoidance of abuse, rather than the simple use of salads, meats, fish, shell-fish, white wines, and champagne. Not only should excess of irritating or alcoholic drinks be avoided, but also that of beverages in themselves inoffensive. For this reason the treatment of the affection by mineral waters should be advised with extreme caution. 3. Voluntary and prolonged retention of the urine should be avoided, as being conducive, in those affected with prostatic disease, to the production of retention, cystitis, etc. 4. Moderate indulgence in sexual intercourse. 5. Consideration of the unfavorable influence exerted by prolonged horizontal decubitus and immobilization. Prolonged rest in bed should be avoided, and before retiring, the patient, if possible, should, if unable to walk in the open air, promenade in his room for fifteen or twenty minutes, and in the morning such exercise should be repeated. During the day sedentary habits should not be contracted, but at the same time fatigue should be avoided. Constipation should be obviated, if existing, without the use of drastic cathartics. A large enema, warm or cold, in the morning exercises at the same time an evacuating and a soothing effect. Emollient enemata, before retiring, frequently also yield good results. 6. The function of the skin should be excited by dry friction and massage. Baths should not be continued beyond fifteen minutes. Regarding the medicinal treatment of the affection, Dr. Guyon suggests: 1. As a remedy for the sclerosis of the urinary apparatus, the use of potassium iodide in quantity varying from eight to fifteen grains daily, during fifteen days or three weeks of every month, and continued for months or years. 2. For the congestive lesion, the careful administration of ergot, nux vomica, and all preparations containing strychnia as a base, is advised. 3. As remedies for vesical irritation, belladonna, hyoscyamus, and the preparations of valerian will be found more offensive than opium and its derivatives, but nevertheless sufficiently active. The bromides are considered to have in vesical disease only an insignificant effect, but in some cases this should be utilized. The foregoing hygienic and medicinal treatment, Dr. Guyon considers, will, in most instances, suffice to overcome the functional disturbances experienced by prostatics, and only when it fails should the use of the catheter be resorted to.

PROGRESSIVE LOCOMOTOR HEMIATAXIA.—Neurologists are acquainted with cases of locomotor ataxy that have symptoms only on one side of the body. Apparently such cases are not of frequent occurrence, but we certainly require more definite information on the earlier stages of tabes dorsalis before a positive opinion can be pronounced on this question. M. Bertoye has placed on record a case of the kind. The patient was a man, aged forty-eight, a weaver by occupation. The previous history gave no evidence of venereal excesses, syphilis, alcoholism, saturnism, or rheumatism. When twenty-eight years of age, "lightning" pains were first experienced. Five years ago, almost suddenly, he was attacked with plantar anæsthesia and inco-ordination of movements of the right leg, which had alone been the seat of pain. A little later the right arm was affected. There was no loss of power and no muscular atrophy. The inco-ordination was evidently due to the want of proper guiding sensations; for with the eyes shut the patient was unaware of the position of the right hand and foot. From a consideration of the literature of tabes dorsalis, and from his own experience, M. Bertoye draws the following conclusions: 1. Progressive locomotor ataxy is often produced as the result of muscular, genital, and other forms of *fatigue*. 2. When this is the mode of production, the disease has a special tendency to affect the overworked part or parts. A corollary is drawn to the effect that certain occupations entailing exaggerated employment of certain functions may determine tabes dorsalis with localization of symptoms in the overworked organ. Lastly, it is argued that if the occupation demands simultaneous over-action of an arm and leg on the same side of the body, the tabes will assume the hemiataxic type. The condition of the knee-jerk is of great importance in cases of genuine hemiataxia, for it disappears on the diseased side and is retained on the sound side.—*The Lancet*, October 3, 1885.

THE OPIUM HABIT.—Dr. J. B. Mattison, of Brooklyn, writes: "One error in your review of my monograph on the treatment of opium addiction should be corrected. In treating the diarrhœa, thirty-minim doses of fld. ext. coto (not coca) are commended. This need, however, seldom arises, not having had a case this year in which an astringent was demanded. Your reviewer asserts: 'The author makes the cure of this "toxic neurosis" appear not very feasible.' Such an impression was quite apart from my purpose."

THE MEDICAL RECORD:

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MODERN THERAPEUTICS.

THE subject of materia medica, considered as one of the seven principal branches of medical instruction, is not an attractive one to the average student. After he has gone over the introduction, learned how to write prescriptions, and plunged into the study of the remedies themselves, he finds himself in a desert where the oases are few and far between. The multiplicity of detail bewilders him. The conflicting opinions of various authorities concerning the physiological action of drugs, leave his mind in doubt. The large number of remedies which he is told in advance are useless, and yet whose preparations and doses he is compelled to learn, complete his disgust. He learns them for examination and then they are forever buried. In short, much valuable time is wasted on what has no practical value.

It is a common remark that the older a man grows the fewer remedies he uses. This does not necessarily arise from a growing distrust in the power of remedies, nor from a cessation of progress in the line of professional acquirement. It is rather because the limitations of the therapeutic effects of drugs become better understood, and the physician learns how to cover more, so to speak, with combinations of the old orthodox remedies. His whole system of therapeutics has grown simpler. There was much sense in the somewhat homely remark of an old practitioner who declared his need of only four remedies, "a heater, a cooler, an opener, and a shutter." This practice has undoubtedly led to the abuse of certain remedies, and made even their names a terror to some people, who have come to regard them as rank poisons. Mercury is a notable illustration. The system was often uselessly saturated with it. The bones were veritable quicksilver mines; yet who to-day denies the wide range of the power of calomel when properly used? The abuse, and not the use, threw medicines into discredit.

There are at the present time two extreme schools of therapeutists. One pins its faith almost entirely upon medicines, though by no means ignoring the good effects of nursing, food, and general hygienic environment; the other has very little faith in drugs outside the specifics, like quinine, mercury, and opium. It relies mostly on food, nursing, and proper surroundings. Its general plan of treatment is to keep the patient comfortable and to trust to the *vis medicatrix naturæ*. This latter plan is not so fatalistic as it may seem. We should, whenever possible, relieve the distressing symptoms of any malady, but until we understand its pathology, we are not in a position to resort with any success to specific medication; hence, the general tendency, as one becomes better acquainted with disease processes, to a diminution of faith in much of the current methods of prescription and to an increasing belief in the reparative or destructive powers of nature, on which we can exert very little influence. This plan, however, does not always yield satisfactory results. An enlargement of our knowledge of pathology has not been followed by a corresponding increase in our ability to cure disease. We are obliged to hold our ideas of treatment in solution, so to speak, and their crystallization must be determined by our increase of positive knowledge. The plan of treating symptoms will be apt to make chemical laboratories of our patients' stomachs, *unless* we bear in mind the actual condition and make our remedies all work toward one end.

The indications for treatment are comparatively few in any one given case. The less we understand it, the more numerous are the vaunted "specifics" for its cure. In a list of thirty remedies at the outside, we can find in ninety-nine cases out of every hundred means wherewith to give our therapeutic skill its fullest scope. The manufacturing druggist, however, gives us new remedies and new preparations of old remedies *ad infinitum*, and we might add *ad nauseam*. Testimonials follow in quick succession, and it requires some firmness to escape being turned aside from orthodox paths. The action of remedies can be taught, it is true, in didactic lectures, but bedside experience alone can galvanize this inert mass of mental acquirement into life. Then only can a man feel any confidence in the action of remedies, whatever may be his "persuasion" concerning their ultimate good.

THE GUARDIANSHIP OF OUR BORDERS.

Now that small-pox has prevailed at Montreal for some six months, very active measures are being taken to prevent its being brought over the border. The National Quarantine Act of 1878, by which Congress conferred authority upon the Executive to prevent the introduction of contagious diseases, has been revived, and its enforcement placed in the hands of the Marine Hospital Service. This Service has established an inspection system along the Canadian border in those States in which local boards are not doing the work. We learn that the States of Michigan and New Hampshire are the only ones that attend to these inspections independently. The others co-operate more or less with the Marine Hospital Service. Meanwhile the National Board of Health has to sit still and look on.

The matter of the protection of our borders against the introduction of infectious diseases appears to be in a decidedly anomalous condition.

AN ENGLISHMAN'S VIEWS OF AMERICAN MEDICINE.

AN English physician, practising in Sacramento, Cal., writes a letter to the *British Medical Journal*, in which he defends the American Medical Association and its action in connection with the Washington Congress, by baptizing the whole American medical profession in mud.

The method is somewhat as follows: After delineating in glowing colors the perfect loveliness of British medicine, he says:

"Turning from this aspect of the question, it is with feelings of sadness and disgust that I view our own. A vast area of country, in parts but sparsely settled; outlying districts, with uncertain and difficult communication. No National law; a State law, in four or five instances; a host of irregulars, impostors, and charlatans, in every depth of ignorance and iniquity. These laws regulating the practice of medicine are often harmful, and always difficult to enforce. Convictions are hard to obtain, and when trials are had before a jury, the law is a dead letter.

"There are numerous 'schools' and 'colleges,' the majority of which have the power of granting diplomas. The requirements of some of these bodies are very low, and, as a consequence, results obtained are inferior. The social standing of the profession is *nil*, that of any 'other kind of doctor' is just as good. It has no distinctive position. The people understand that there are three 'schools' of medicine—the Allopathic, the Homœopathic, and the Eclectic.

"Such is the standing they have acquired that, in some States, mixed boards of health have been appointed, comprised of 'representatives' from the 'different schools of medicine.' There is no civilized country in the world where empiricism has such latitude and scope, none where intelligent people will allow themselves to be so easily duped."

It is not a pleasant thing to find American medicine pictured in this *ex parte* manner to the whole British medical public; nor was it, we venture to add, either necessary or in very good taste to make such disadvantageous comparisons simply for the purpose of helping an Association of which the writer confessedly knows but little.

Much as we dislike to bring up such issues, or to appear in the rôle of an apologist, justice compels us to utter some protest against the Anglo-Sacramentese view of the state of medicine in this country.

We would suggest, first of all, that our country is not quite such a lonesome and sparsely settled tract as is intimated. The centre of population is not a day's trip from New York. Out of our sixty thousand physicians one-half practise in our Atlantic seaboard States, while all live in accessible localities and are in regular communication with the outside world. When we add that the majority read THE MEDICAL RECORD, and often visit the metropolis, enough on this point has been said.

Our medical laws are not uniform, it is true, and, like the British laws, are not perfect. But, so far from their being "a State law in only four or five instances," twenty-nine or more of our States have laws regulating medical practice. According to Dr. R. J. Dunglison, these laws are working satisfactorily in a large number of States, while everywhere they are progressing toward unity and efficiency. We have numerous cheap colleges, we must admit, but we also have some of the best didactic institutions in the world, and it is from these that the great majority of students graduate.

No spectacle can be more curious than that of an English physician deploring the social standing of American practitioners. Socially, the position of the American physician is a good one; it is indeed whatever the individual desires to make it. Medicine does not handicap, but rather helps him. The American physician is better paid and lives far better, probably, than the average European practitioner. Best of all, perhaps, he is unhampered by traditions and usages that limit his progress or obstruct his ambitions. No inflexible rules assign his social position, limit his future, and dampen his energies. This freedom for endeavor and largeness of opportunity is a thing which gives to American medicine, despite all its failings, a character that has lifted it to equality with any in the world. The daring, ingenuity, therapeutical aptitude, and progressiveness of American physicians and surgeons are recognized, despite some non-uniformity in our medical laws; and, by virtue of these qualities, we have contributed as much as our well-regulated cousins across the water to gynecology, otology, orthopedics, dermatology, and perhaps some other departments of medicine. We are not, in fact, quite such a lawless and quack-ridden body of men as is intimated at Sacramento.

The English correspondent referred to has given, we fear, a somewhat rose-colored view of the state of English medicine, in his desire to have a good background for setting off our American deficiencies. Will he pardon us for intimating a doubt whether quackery is entirely eliminated from Great Britain, the home of anti-vaccination, anti-vivisection, the Salvation Army, the *Pall Mall Gazette*, and Holloway's pills. Is education in such an admirable state when it has nineteen licensing boards of variable standards, and when it allows the largest city in the world to become the poorest educational centre in Europe. We admit that the social position of the English physician is rigidly and perhaps suitably fixed, a little above the head-butler and a little below the curate; but we can hardly see why this is claimed as an advantage; nor, in the light of the social success of such men as Sir Oscar Clayton and Dr. Kidd, do we see how the English correspondent can deny any social standing to English "irregulars."

As for the American Medical Association, the whole profession has at one time wished it well, and hoped much from it. But what actual good is it doing? Has it helped a single educational reform, lessened quackery, amended, unified, or helped the enactment of medical laws? Decidedly not. That it has done good in the past, in stimulating medical organization and promoting the solidarity of regular medicine, we gladly admit. It is because it has ceased this work and has broken and divided the profession that it meets opposition and criticism now.

We should like to see a national medical body, wisely regulated and animated by broad and unselfish purposes; but the American Medical Association does not now furnish the picture.

THE ECLECTICS.

WE believe that most physicians have very vague ideas as to what the so-called "Eclectic" really is. Perhaps the eclectic himself has been at times a little mixed as to his intellectual and medical status.

"Eclecticism" in medicine, whatever it once was, seems now to be losing its distinctive character as a

school having a peculiar therapeutic practice, and to be becoming simply a watchword for those who desire the greatest possible freedom from restrictions, legal and social, on the practice of medicine. The Eclectic Medical Society of this State has declared formally against all attempts at placing legal restrictions on the practice of medicine, and the President of the Eclectic Medical Association of Pennsylvania declared, in his annual address, that the principles of eclecticism are based mainly on "the American principle of freedom." Eclectic medical journals raise the same cry against all legal or social restrictions to the free practice of medicine by everybody on everybody.

All this might be very well if the principles were carried out with an honest regard for the welfare of the profession and the State. But in practice "eclecticism" is in the main an attempt to justify medical diploma-mills and cheap colleges, and to organize and give respectability to quackery and quackish practices. The creed is: "Let anyone practise who wishes to do so; let him get his diploma as he wishes, and let him help his practice with as much advertising as he desires."

Such a "school" may do some mischief for a time; and it is shameful that it can attract even as much attention as it does, but it never will succeed in establishing a position or winning the respect of society.

The practice of medical advertising is bound to increase, in a measure, in this country, but the nature of medical services is such that it never can or will be indulged in by the vast majority of competent practitioners.

As for diploma-mills, in every succeeding decade a thorough and sound medical education will tell more with the people, and the ignorant charlatan will have to skulk more and more in the by-ways. The annual vaporings of "eclecticism" are like the disagreeable miasms that arise from broken and half-cultivated ground—as the country settles they disappear.

THE MAMMARY GLAND IN ART.

In a large number of treatises on physiology, even of the most advanced character, the statement is made that the function of the human mammary gland is the secretion of milk. We are obliged to take the opportunity of announcing that this is a mistake, and only goes to show how blind the scientific mind often becomes to the evidences of serious progress in the world about it. We admit, to be sure, that the mammary glands of women can and do sometimes secrete milk for limited periods of time, and in a gentle and apologetic manner; but all this has become quite a secondary matter, as wide-awake observers of human progress well know.

There can be no doubt whatever that the true and essential function of these glands at the present day is ornamental and æsthetic. Their noblest opportunities are not in the "milky way," but in the line of high art and realistic delineation. They are functionally at their best when they are being painted in strong lights and shadows, photographed by a patent process and exhibited in our shop windows for the education of the masses. The mamma belong to art, not infancy, and the modern painter needs only a bust of recent postpartum proportions in order to be caught up at once by the whirlwind of success.

This is, in fact, the glandular era in art; a time when a walk through our picture-galleries is one long "bust.' This era began somewhat sharply in Paris, eighteen months ago, when a picture was exhibited of two women naked to the waist, fighting a duel. There were some indistinct suggestions of a background, a foreground, and certain other conventional accessories, but the main features were two sets of mammary glands, and to all appearances, it was these interesting lacteal organs that were having the protuberant controversy. From that time there has been a steady influx of contributions to mammary art, and it has now got a fixed and inflexible hold upon the public.

We wish to treat what is plainly a delicate subject in a scientific and purely inoffensive manner. We have ventured upon it with some diffidence, and only because we feel it to be a matter of real importance to the physician to learn that the human mamma has been merely undergoing a certain change of function and rise in æsthetic importance. And we have not presented all the evidence of these facts. It is well known that a very large industry has been established for the manufacture of infant foods. These foods are doing, with the help of the cow, what the mammary gland once did. The manufacture of infant foods supports a large number of people, adds diversity to our industries, and provides an additional means for the accumulation of wealth. It has been a fundamental principle in our political economy that the State should support and protect its infant industries, of which the manufacture of these foods is surely the purest type.

No wonder, therefore, that they have thrived, and opportunely supplemented the needs of the artist world.

Both the demands of art and the dictates of sound political economy, therefore, require that the lacteal glands, as such, should go. We have every reason to believe that in the higher and municipal types of civilization they have already gone.

Withdrawn from the soulless gaze and sharp erosive grasp of the infant these glands are now appearing in unimpoverished splendor on the canvas of the artist, the sensitive plates of the photographer, from which points they furnish, doubtless, a subtle delectation to appreciative adults.

Here is, apparently, the illustration of a splendid evolutionary and physiological triumph: that what was once, in some pre-*ornithorhynchus* state, a dull, sebaceous bud, has blossomed into the rounded bust that forms the *pièce de resistance* of a modern atelier.

We will confess now that, speaking for the physician, we do not feel entirely satisfied with this extreme process of evolution. It certainly would be better for babies if they could make some arrangements with high art and the manufacturers of artificial milk. They might argue, with reason, that there is no actual need for painters to represent the female form as composed mainly of two busts and a mass of tangled hair; and that it is not essential that artificial food-makers force their wares with such an aggressive pertinacity, painting the town and country with their advertisements, until a mother who nurses her child feels in a vague way perhaps that she owes a general apology to the industries of the country.

THE "PLEA FOR THE OLDER PHYSICIAN."

We have received a letter from a young physician, practising in a Western State, commenting on our editorial, "A Plea for the Older Physicians." The truth of the complaint which we published is admitted, but our correspondent seems inclined to doubt the statement that the older physicians are less pushing and noisy in their methods than are the younger of to-day. He also asserts, with rather too large an emphasis, that "young physicians as well as old are an absolute necessity." This is true; but so many young physicians as we now have are not a necessity; and it is the attempts of the aggressive and ignorant youngsters trying to crowd out the experienced and more modest elders that our first correspondent protests against.

Finally, our young correspondent writes:

"I am a young man, but, I think, honest, at least in thought. My rule is this: Never to treat my fellow-practitioner unkindly *first;* after being used badly to cut their throats whenever and wherever I can; and I find in that way, and by paying strict attention to *my own* business, I have little trouble in doing a good business for A YOUNG MAN."

We trust that we may be allowed to place a very gentle interpretation on the expression "cut their throats." But, even at its best, it represents an unchristian conduct, and one unworthy of a generous nature. The teachings of the highest ethics and the best intelligence are against the use of aggressive and spiteful modes of resentment.

We more than ever feel that our first correspondent was right in pleading for the older physicians, if the younger ones are adopting a cut-throat policy against every one whom they believe is the first to treat them unkindly.

"UNA FIDES ALTARE COMMUNE."

An ornamental scroll bearing this inscription suspended above the presidential chair of the Academy of Medicine has been a familiar sight to those who have attended the deliberations of that learned body. "One Faith at a Common Altar." It sounds effective and inspiring, whether in English or in Latin; but what is its purport with reference to the Academy? What is the interpretation? "The Common Altar" is plain enough: all are disciples of Æsculapius at the Common Altar of Medicine. But supposing that the members of the Academy were called upon to state what was intended to be conveyed by the "*Una fides,*" it is doubtful if there would be a unanimity of opinion. As this motto was adopted some time ago, it may at once be set aside that it has anything to do with the "faith cure." Possibly it means the universal faith that each physician has in his ability to cope with disease; or, again, has it reference to the "pathies," and is it, then, a battle-cry for the triumphant progress of Allopathy?

Probably the little scroll with its Latin inscription was placed by someone whose prophetic soul foresaw the danger of warring codes, and therefore gave this exordium. When viewed in this light it becomes pathetic. It is doubtful if in these days, when the spectacle of the attempted organization of the International Congress is a sight for gods and men, that the motto would have its present reading. The selection of the adjective would not have been so reckless. After consideration of *Multæ fides*, or *Nulla fides commune altare*, the whole would have been abandoned as not sounding well, and something else more general in application and less difficult of interpretation would have been selected.

VACCINATING BY CONTRACT.

The physicians of New Haven have been much disturbed over a proposition made by the city authorities to let out the public vaccinating to the lowest bidder. It appears that $3,000 being voted for this purpose, the Selectmen decided to expend the money as economically as possible, hence the adoption of strictly business methods in the matter. The New Haven Medical Association held a meeting on November 6th, in which this subject was warmly discussed, and the action of the authorities condemned. A set of resolutions was passed, in which it was announced "that it is the sense of this Association that no member should put in a bid to do the vaccinating under the proposed plan to obtain the service at the lowest cost."

The Selectmen have not, however, changed their plans.

We fully sympathize with the feelings of the New Haven medical men. Apart from any question of disrespect to the profession, it is certainly unwise and uneconomical to allow public vaccinating to be done by any but careful and competent men. Such certainly would not be likely to put in a bid for a cheap job.

Vaccinating is not a difficult or mysterious operation, but it does require intelligence and experience; moreover, by careful vaccinating many bad arms and much actual sickness can be averted. Some considerable degree of experience is also required to determine whether an inoculation has actually "taken." Altogether, we can safely assert that it is not merely professional feeling, but the dictates of common-sense, which lead physicians to condemn the putting out of vaccinating to contract. At the same time, it will be a mistake if medical men adopt any trades-union tactics, and deliberately vote to "boycott" those, if there be such, who have so much poverty of purse and of spirit that they will do cheap vaccinating by contract. An earnest protest, with a cogent presentation of arguments against cheap and irresponsible methods of getting public vaccination done, is all that the dignity of the profession requires. If there are not sound reasons against it, indignation meetings and "boycotting" will not be sufficient. There are too many poor doctors, unhappily, in our cities for such measures to avail.

If published reports do not belie it, the New Haven Medical Association went a little too far in this matter.

THE PROPOSED ENLARGEMENT OF THE AMERICAN ACADEMY OF MEDICINE.

At the last meeting of the American Academy of Medicine, held in this city recently, an amendment to its constitution was offered by the President, Dr. Ginon, which will, if adopted, quite change the character of the body in question. This amendment provides for the

admission to membership of "graduates in medicine, without literary degrees, who have distinguished themselves in medicine or the collateral sciences." By enlarging the Society in this way, the belief is expressed that a new and greater future may be opened for it; and that it may, in fact, become a genuinely national medical body, membership in which would be a coveted honor. It has for some time been observed that the American Academy of Medicine was working along too narrow lines, and was neither in full sympathy with the spirit of the times nor the most progressive instincts of the profession. It has clung too rigidly to the cultivation of an excellent but not over-fertile idea—that all doctors should be Masters of Arts. This idea is a good one, but a great national society cannot be based upon it, or upon any constitution of which that is the central piece. The American Academy, under its present constitution, must be content, therefore, to do a little good in stimulating a wider desire for preliminary education. To become anything more, its organization must be changed in some such way as has been proposed. We feel sure that its field for usefulness would be greatly enlarged by this new amendment, or one of a similar character.

News of the Week.

GERMAN VIEWS OF THE INTERNATIONAL MEDICAL CONGRESS.—Professor Ewald, editor of the *Berliner Klinische Wochenschrift*, has an editorial in his issue of October 26th on the International Medical Congress. After giving an account of the present troubles, he laments the deposition of the old committee, and says that the German physicians will not be likely to visit a Congress that is supported by the new committee, and one that has by its peculiar policy so divided the profession. He expresses the hope, however, that it is not yet too late to amend matters, and thinks that at the next meeting of the American Medical Association, the old committee may be reinstated and that everything will yet be harmonious. We wish that such hopes were not so utterly futile. Since the extraordinary action of the Executive Committee, in declaring its independence, an action so inconsistently defended by those who claimed that the first Committee was a creature of the Association, there is little hope that that body can do anything, however strongly it may be disposed.

THE INTERNATIONAL SANITARY CONFERENCE.—Public opinion, both at home and abroad, says the *British Medical Journal*, appears to agree in thinking that the International Sanitary Conference that was "adjourned" last June, is never likely to reassemble. Last week the *Popolo Romano*, referring to the fact that the 16th of next month is the date fixed for the reassembling, stated that it was not certain if the event would take place, inasmuch as several of the States which were represented when the Conference met in May last had not sent in their adhesion to the proposal for its reconvocation.

"THE FLORIDA MEDICAL JOURNAL" is the title of a new monthly medical journal, published at Jacksonville, Fla., and edited by Drs. T. O. Summers, C. H. Mallett, and Neal Mitchell. It is edited with spirit and shows a mastery of the rhetoric appropriate to the land of flowers. We congratulate it on not being the organ of a new medical college, as is just now too often the case with new medical journals.

THE HOSPITALS OF ROME.—A commission, specially appointed by the Royal Academy of Medicine of Rome, has pronounced a very unfavorable opinion on the hospitals of the Italian capital. It condemns the position of all, with the solitary exception of the Hospital of St. John in Lateran; but the construction and sanitary arrangements are censured without reservation.

THE RUSSIAN MEDICAL CONGRESS.—A lengthy programme of subjects for discussion by the congress of St. Petersburg and Moscow Medical Societies, to be held from December 26th to the 31st, has been published. Among other topics the following may be mentioned: Self-help for Medical Men; Post-graduate Courses; The Best Way of Increasing the Knowledge of Ophthalmology among Russian Surgeons; Unanimity in Methods of Disinfection; Hospital Diets; Paraldehyde in Whooping-cough; Disinfection in War; Tubercular Joints; Transfusion; Antiseptic Midwifery in Hospital and Private Practice; The Need of a Special Obstetrical and Gynecological Society in St. Petersburg, and the Establishment of a Special Journal dealing with this Department.

CHOLERA IN SPAIN AND ITALY.—Cases of cholera are still reported, but the disease continues to decline. The reports of the National Board of Health show that in Spain there were, from March 4, to September 28, 1885, 267,689 cases of cholera with 98,929 deaths, giving a mortality of 36.9 per cent.

THE SMALL-POX EPIDEMIC still continues with unabated activity at Montreal. During the week ending November 10th over 230 deaths were reported.

BEQUESTS TO NEW YORK CHARITIES.—By the will of the late John P. Howard, about $250,000 is divided equally among the Association for the Relief of Respectable Aged Indigent Females in New York, the Home for Destitute Children in Burlington, Vt.; the New York Society for the Relief of the Ruptured and Crippled, St. Luke's Hospital, New York; New York Juvenile Asylum, Children's Aid Society, New York, and the New York Orphan Asylum.

BORACIC ACID is largely used by milk-dealers in the summer time to preserve milk. It is, we understand, the basis of a preparation known as "vex magnus.'

DEFENCE OF A MONTREAL ANTI-VACCINATIONIST.—A correspondent from Montreal, M. M. Mitivier, writes us a letter defending Dr. Emery Coderre, the professor who has been fighting the dogma of vaccination. We are informed that Dr. Coderre is a gentleman of profound learning, large experience, and attractive personal character, and that he has been greatly maligned on account of his anti-vaccination views. We are glad to learn that the Montreal professor is so admirable a man. There are certain times, however, when a well-meaning anti-vaccinationist may do more harm than a whole band of murderers.

AN HONOR TO A MEDICAL MAN.—In presenting the Albert Medal to Dr. S. C. Thompson, of Tyrone Infirmary, the Lord-Lieutenant of Ireland paid a just

tribute to the personal courage of Dr. Thompson, and took the opportunity of saying some handsome things about the professors of medicine as a body. The Earl of Carnarvon is the only English peer who has a near relative at this moment engaged in the practice of medicine, and therefore it was with peculiar fitness that it fell to his lot to make this public recognition. Such courage as Dr. Thompson has displayed, and for which he was worthily rewarded, is, we have reason to believe, common to the profession. Every day deeds of self-sacrifice, in the truest sense heroic, are done by medical men, and it is pleasant to see that they are occasionally recognized. "Every year thousands of illustrations of self-denial, self-sacrifice, and sympathy with human suffering in its most terrible forms are exhibited, and not less courage in its best and highest sense." These were the words of the Lord-Lieutenant, and they do not overstate the case. The honor done to one of its members is appreciated by the whole profession. We congratulate Dr. S. C. Thompson on his courageous discharge of duty, and on the recognition his merit has received at the hands of the Sovereign. It is somewhat remarkable that this presentation should have taken place as nearly as possible on the anniversary of the death of another medical hero—the late Dr. Rabbeth.

Office Thief.—A man is calling at physicians' offices who, in case he finds the doctor at home, represents that he suffers from some nervous affection of the scalp; is on the point of removing to this city from Detroit; may bring his family with him; is just now in some haste to go down town to keep an engagement, but will call at some other time by appointment if the doctor thinks anything can be done for him, etc.

The Constitutionality of Laws Regulating Medical Practice.—The Attorney-General of Indiana has given an opinion upon the State Medical Law, in response to the request of the Secretary of the State Board of Health, Dr. C. N. Metcalf. This law requires that in order to practise medicine a person must obtain a license, and in order to obtain a license he must have a diploma from a reputable medical college, or have practised medicine continuously for ten years in the State, or have practised three years in the State and attended one full course of lectures at a medical college. The Attorney-General is doubtful as to the constitutionality of these last two provisions, and advises a settlement of the question in the courts. Of the constitutionality of laws regulating medical practice he expresses no doubt.

The Endorsement of Medical Diplomas by Colleges.—By a resolution of its Faculty, in the future all persons intending to practise medicine in Pennsylvania, and desiring the endorsement of the University of Pennsylvania on its "diploma demanded by Section 4, of the Act of 1881, will be required to pass an examination on Chemistry, Anatomy, Physiology, Materia Medica, and Therapeutics, Pathology and Morbid Anatomy, Practice of Medicine, Surgery, and on Obstetrics; failure in any branch will cause rejection. To compensate for the labor of such examinations, a fee of $30 will be charged." The University Faculty announce that "during the last few months it has become more and more apparent that the University of Pennsylvania, if it continues to grant certificates as to the genuineness of diplomas, must issue such certificates for the diplomas of all sorts of colleges. The genuiness of the diploma is in no way dependent upon the scientific character of the body issuing it. A diploma is genuine if the body from which it emanates has a legal right to issue such diploma, and if the law is to be interpreted by the University as requiring its faculty simply to testify as to the genuineness of a diploma, it can make no difference whether such diploma is issued by a regular or irregular college. Further, the gradations between colleges in this country are so close as to make the drawing of lines a task of great difficulty, and the Medical Faculty cannot set itself up as a judge between colleges, and say that the diploma of this suffices and that does not. A very serious matter is the fact that these certificates issued by the University are looked upon by persons ignorant of the circumstances, *i.e.*, by the general community, as endorsements of the medical qualifications of their possessor, and as being in some measure tantamount to the diploma of the University. When the ease with which such genuine diplomas are obtained in America, and the little significance which so many of them have, are remembered, it becomes evident that the issue of these certificates by the University is an injustice to its own graduates." We would call the attention of the schools of our own State to this action of the Pennsylvania College. The law with us resembles that of Pennsylvania, and there is no reason why impositions may not be practised upon the Faculties of our schools.

Cincinnati College of Medicine and Surgery.—Dr. Charles E. Caldwell has been elected to the Lectureship of General Pathology. The large dispensary accepts patients only upon presentation of a card of introduction signed by a responsible person. In cases of doubt, independent inquiry is made, and when found able to pay, patients are denied the charity of the institution.

To Discuss the Medical Charity Question.—We trust that all interested in reforming the present abuses of medical charity will bear in mind the invitation of the Charity Organization Society to meet at the Academy of Medicine on Friday evening, November 20th. This promises to be a step in the right direction, and the meeting should be well attended. The times are ripe for practical suggestions, and the Charity Organization Society is able and willing to carry them out.

Out-patient Department of the New York Hospital.—It is rumored that the out-patient department of the New York Hospital is to be reorganized.

St. Francis Hospital, New York.—Examinations for the filling of the yearly vacancies on the house-staff of this hospital will be held at the hospital, December 8th, at eleven o'clock. Applications should be addressed to Dr. Joseph W. Howe, 38 West Twenty-fourth Street.

The Cocaine Habit.—Dr. A. P. Meylert, of New York, writes: "Articles on the subject of cocaine hydrochlorate are occasionally published, in which it is assumed that there is no danger of the formation of a cocaine habit. This is an error. Physicians should know that cocaine must be prescribed with considerable caution, where its administration is left at the patient's discretion. I have already had one case of cocaine habituation, complicating the morphine habit."

Obituary.

WILLIAM BENJAMIN CARPENTER, M.D., LL.D.,

LONDON, ENGLAND.

WILLIAM BENJAMIN CARPENTER, M.D., LL.D., F.R.S., F.L.S., F.G.S., the eminent English physician, physiologist, and writer on scientific subjects, died in London, November 9th, from the effects of terrible burns caused by the upsetting of a lamp while he was taking a vapor-bath for rheumatism. Dr. Carpenter, who was in the seventy-third year of his age, was born at Bristol in 1813. He studied medicine, and was graduated M.D. from the University of Edinburgh in 1839, when he began the practice of his profession in Bristol. He soon resolved, however, to devote himself wholly to scientific and literary pursuits, and in 1843 he removed to London, where his writings at once attracted attention, and he was appointed Examiner in Physiology and Comparative Anatomy in the University of London, and Professor of Medical Jurisprudence in University College. He held these positions until 1856, when he was appointed Registrar of the University of London. In 1861 the Council of the Royal Society awarded to Dr. Carpenter the royal medal for his contributions to physiological science. From 1868 to 1870 he took a principal part in the expeditions fitted out by the Government of Great Britain for the exploration of the deep sea, which yielded results of the greatest value to physical and biological science, and it was at his suggestion that the Challenger was afterward dispatched to prosecute similar researches more extensively. The honorary degree of LL.D. was conferred upon him by the University of Edinburgh, in 1871. Among his more widely known scientific works are: "The Microscope and its Revelations," "Principles of General and Comparative Physiology," "Principles of Human Physiology," "A Manual of Physiology," "Principles of Mental Physiology," and an "Introduction to the Study of the Foraminifera." He was the editor for many years of the *British and Foreign Medico-Chirurgical Review.*

Reviews and Notices.

LECTURES ON THE DIAGNOSIS OF DISEASES OF THE BRAIN. Delivered at University College Hospital by W. R. GOWERS, M.D., F.R.C.P. 8vo., pp. 246. Philadelphia: P. Blakiston & Co. 1885.

IT could hardly be expected that Dr. Gowers, in a small work, should deal so successfully with the subject of diseases of the brain as he did with diseases of the cord. It is indeed quite out of the question to give in a nutshell an account of cerebral anatomy, physiology, and pathology. Our author recognizes this quite fully, and has done his best to meet the difficulties, and he has succeeded in making a very useful little work.

It is put in the form of lectures, of which there are eighteen. The first three are devoted to cerebral anatomy and physiology. Of this a very good account is given. The author, however, does not describe so fully or accurately as he might the course of the afferent fibres into and through the brain.

The descriptions of the origin and relations of the cranial nerves are clearly given, but naturally present nothing more than is given by standard text-books.

The subject of symptoms is considered under the head of motor symptoms, sensory symptoms, cranial-nerve symptoms, and mental symptoms. There is very little to criticise and much to praise in the mode in which the author has dealt with this the major part of his work.

In the thirteenth lecture the subject of local diagnosis is taken up; after this, the diagnosis of the nature of the lesion, while in the last two lectures is a review of symptoms due to the various lesions to which the brain is subject.

The book is illustrated with several good diagrams.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, October 28, 1885.

JOHN A. WYETH, M.D., PRESIDENT, IN THE CHAIR.

DR. L. WALDSTEIN, from the Committee on Microscopy, presented the following report on the specimen presented by Dr. H. J. Boldt, at the last stated meeting:

"Transverse sections show that the specimen is composed of fibrous tissue in process of granular disintegration, between the fibres of which are found a series of large distended, generally rounded spaces, either entirely empty or partly filled by a finely granular mass and a delicate network of fibrin; a state of œdematous imbibition of the submucous tissue.

"As regards the muscular elements, they are comparatively rare throughout, and when they can be demonstrated they have undergone either a granular or more hyaline degeneration, the nuclei being faintly and diffusely stained by the reagent. The blood-vessels are in many cases densely filled with blood-corpuscles, and surrounded by small hemorrhagic foci; most generally, however, they are found empty and their walls degenerated, while the nuclei have entirely disappeared. The thickness of the specimen can therefore be accounted for by the œdema of the tissue and the comparative insignificance of the muscular components stands as additional proof that it is only a superficial stratum of the urinary bladder. The committee has been unable to make out any remaining epithelial covering or glandular structure."

DR. WESLEY M. CARPENTER presented, on behalf of a candidate, a specimen of *primary ulcer of the duodenum;* also a specimen of *malignant disease of the liver.* The specimen was referred to the Committee on Microscopy.

DR. L. WALDSTEIN presented, on behalf of a candidate, a specimen of *sarcoma of the toe.*

DR. H. MARION SIMS presented

A UTERUS AND ITS APPENDAGES REMOVED BY HYSTERECTOMY.

Mrs. M——, aged thirty-eight, consulted me on October 1st of this year. She had been married eighteen years, and had one child fifteen years ago. She had always been perfectly regular in her menstrual periods, with normal flow, lasting four to five days, and never experiencing any pain with menstruation. She had been a remarkably healthy woman up to three years ago, in every respect, and had never been sick in bed for any length of time in her life. Three years ago, however, she noticed a heavy, dragged feeling across the lower part of the abdomen, with darting pains running down through the vagina and in both iliac regions. She thought nothing of it at the time, but the pains becoming more and more severe and lasting, she finally consulted a doctor, who told her she had an enlargement of the uterus that nothing could be done for. She had increased in size, and the pain becoming unbearable, she finally concluded something serious must be the trouble. She was a very large woman, weighing two hundred pounds, and I found on examination that she had a large fibroid tumor of the uterus. The uterine cavity

measured but four inches in depth, and I found the whole mass perfectly movable from side to side, and from before backward. Pressure caused pain on any side of the mass. It was determined to remove it, and she eagerly consented to an operation, fully appreciating all the dangers attached to it.

She was etherized twelve days ago, and I performed the operation, assisted by Drs. Pryor, Nash, and E. Liell.

An incision four inches long was first made, and this had to be extended to nine inches before I had room to roll the tumor outside of the pelvic cavity. After a great deal of difficulty this was successfully accomplished, a rubber ligature passed around the mass about on a level with the os internum; skewers were passed crosswise just above the ligature, and the whole mass then cut off above the skewers. Being such a large woman, with such thick abdominal fat, I closed the peritoneum muscles and fascia together with catgut ligatures, and then brought the skin and fat together with silk ligatures widely separated, placing a small rubber drainage-tube between every second of these ligatures, in order to prevent the abdominal abscesses which are so apt to occur when the adipose tissue is so thick. The stump of the tumor and uterus was securely held in the lower end of the incision by the skewers, the peritoneum being brought closely around it just below the rubber ligature. In order to prevent the projecting part of the skewers from causing sores on the abdomen and embedding themselves in the fat, I had taken warning from a former experience and had rubber plates made to place under the ends of the skewers.

The patient rallied very well from the operation, which lasted almost an hour. No nausea whatever followed, and she complained of very little pain. The next day she was bright and cheerful and had no severe pain. She had had in twenty-four hours only two one-fourth grain of morphia hypodermically. Her temperature on the second day was 100°, and her pulse only 104.

On the third day I dressed the wound and found everything progressing most favorably. Pulse was 108, and temperature 101°. About midnight of the third day she complained of a fulness of the stomach, and some tympanites. The following morning she complained still more of the tympanites, and a feeling as though something was in the stomach that she wanted to get rid of, but could not. Her temperature then was 100½°, and pulse 114. At four o'clock in the afternoon of the fourth day she complained of a sudden pain in pit of stomach, followed at once by belching of an immense amount of wind. This in turn was followed by the vomiting of at least a gallon of black water from the stomach and intestines, filled with fecal matter. One or two gasps followed this and my patient was dead. She had died of asphyxiation, from the large amount of fluid being thrown up from the stomach and intestines by the reversed action of the bowels. After death she had the appearance of a person who had been drowned.

I opened the abdominal cavity, and found everything in a beautiful process of healing. No sign of peritonitis or septicæmia was visible, and the pelvic cavity was dry and clean. I did not discover any invagination of the intestines.

The weight of the tumor after removal was nearly fourteen pounds.

PRIMARY NEPHRITIS IN A YOUNG INFANT.

Dr. J. Lewis Smith presented a specimen with the following history:

Margaretta B——, born January 28, 1885, was apparently well until July 15th, when the mother said that she had passed no urine in twenty-four hours. By one dose of sweet spirits of nitre the secretion was restored. Four days later, July 19th, the secretion of urine again ceased, but it was again restored by the same medicine. After this the child seemed well until July 31st, when diarrhœa occurred, and continued till the close of life, but without vomiting. The stools were green, and numbered from four to eight daily. On August 2d the infant had general convulsions lasting about four minutes, the only one during her illness. The eclampsia was succeeded by well-marked nervous symptoms, such as strabismus, rolling the head, twitching of single muscles and groups of muscles, the uttering of a sharp, piercing cry at short intervals, and rolling the eyes. These symptoms subsided in three days, except the rolling of the head which continued until the close of life. The fontanelles were not elevated; there was a frequent cough during the last two weeks of life, and the infant was unable to nurse. Death occurred on September 1st, at the age of seven months and three days. The temperature, taken daily during the last month of her life, was usually between 100° and 103°. It was commonly higher in the latter part of the day than in the morning. The highest evening temperature was 104° on one day, and 105° on another.

Autopsy.—Body not emaciated; alopecia over the occiput, due to rolling of head during the illness; the usual post-mortem discoloration along the back; a large amount of serum, for the age of the infant, in the cranial cavity external to the brain, estimated at from one to two ounces; brain preserved for subsequent dissection; ante-mortem clots in both ventricles of the heart; hypostatic congestion and commencing pneumonia in both lungs, posteriorly, to the depth of half an inch from the base to near the apex; anteriorly the lungs emphysematous.

In the stomach were spots showing post-mortem digestion; intestines of a pale appearance throughout; liver and spleen congested. The kidneys much enlarged; that on the right side showed cortex thickened and pale, and the pyramids large and red; hemorrhagic spots in the upper part of this kidney, and the mucous membrane of its pelvis deeply injected. The left kidney was much congested, so that blood flowed from its incised surface, and the pyramids and cortex were of a uniform red color. The capsules of both kidneys were non-adherent. The mucous membrane of the bladder was in a state of inflammation; urine retained in the bladder contained albumen in quantity nearly sufficient to solidify the specimen; hyaline, granular, and epithelial casts in great abundance; epithelial cells, red-blood corpuscles, crystals of triple phosphate and cystine.

Remarks.—It will be observed that the first symptom which attracted attention to this case was suppression of urine, which was relieved by treatment. This was followed by eclampsia and other cerebral symptoms, and diarrhœa, which continued until the close of life. It appears from the history that this patient had idiopathic nephritis, which gave rise to certain, if not all the symptoms and lesions observed in the case.

The case shows us how important it is to examine the urine in the obscure diseases of children, for we may find the kidney affected when there are no pronounced symptoms referable to this organ. The frequent occurrence of nephritis in scarlet fever has long been known. Its occurrence in a majority of the cases of diphtheria of a severe type, and in many cases of a mild type, was discovered, not many years since, by Mr. Wade, of Birmingham, and it is now known to occur occasionally in other febrile diseases, as measles and parotiditis. But I believe that the profession too much overlook nephritis in children occurring as an idiopathic or primary disease.

Microscopical examination, made by Dr. Frank Ferguson: "Kidneys of a child; surfaces lobulated, capsules loosely adherent. There are extensive superficial hemorrhages in the cortex of each organ, just beneath the capsules. There are also numerous hemorrhages in the cortex and medulla of each organ. No change noticed in the vessels' walls. In places the convoluted and straight tubules are not seen, and in these areas small, round, and spindle-formed cells are abundant. The straight tubes contain hyaline and granular casts. There is no increase in the fibrous tissue."

The Society then went into executive session.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, November 5, 1885.

A. JACOBI, M.D., PRESIDENT, IN THE CHAIR.

DR. D. B. ST. JOHN ROOSA read a sketch of the life of

JAMES L. LITTLE, M.D.,

and of the twenty-five years in which he practised surgery (see RECORD for November 7th).

DR. PAUL F. MUNDÉ then read a paper on

ELECTRICITY AS A THERAPEUTICAL AGENT IN GYNECOLOGY,

which was prefaced by a brief reference to the use of this agent in obstetrics, as for controlling post-partum hemorrhage, for influencing the whole period of labor, induction of premature labor, in extra-uterine pregnancy, and for the nausea and vomiting of pregnancy.

His chief object, however, was to discuss the therapeutical application of electricity in gynecology.

The modern text-books on diseases of women casually refer in general terms to the faradic or galvanic current as a measure to be employed for certain diseases, and the manner of using the agent is briefly described in some of the works on electricity, notably in Beard and Rockwell's comprehensive text-book. Among journal articles on this subject which have attracted attention during recent years are chiefly those of Tripier and Apostoli, both of Paris, the former having lauded the value of electricity in uterine displacements; the latter, in uterine fibroids and pelvic cellulitis. Bayer has but little to say as regards gynecology, and limits his observations almost entirely to obstetrics.

Despite these various articles and the undoubted value of electricity in many of the conditions referred to, it can scarcely be said to have become popular with the mass of the profession, either in obstetrical or gynecological practice.

The range of applicability of electricity in the diseases peculiar to women was quite large enough to make it a valuable adjunct to other methods of treatment, especially as some of these affections were but little amenable to the routine remedies. Thus, the faradic current had been found useful in the various conditions of malnutrition of the sexual organs (arrest or deficiency of development of uterus and ovaries before puberty or excessive involution after parturition; amenorrhœa, irregular menstruation); deficient contraction of uterus (subinvolution, menorrhagia); displacements due to relaxation of ligaments. The galvanic current had been employed with benefit under circumstances where the melting down and absorption of adventitious products was desirable (subinvolution and hyperplasia of uterus, old plastic exudations, and adhesions from pelvic cellulitis and peritonitis, chronic oöphoritis and perioöphoritis; pelvic neuralgia, chiefly when due to pressure by exudations; fibroid tumors. And the galvano-cautery had been recommended by some authors for the cure of hyperplasia, fibroid and ovarian tumors). The use of the galvano-cautery did not properly come within the scope of this paper, since the electric current then acted merely in a secondary capacity as a heat-producing factor, the heat and not the galvanic current being the therapeutic agent.

His object was to show that it required no special talent and no prolonged study of the mysteries of electricity, and no complicated or very expensive apparatus to enable the practitioner, *who is competent to correctly diagnosticate his patient's condition and form therefrom the proper indication*, to employ the electric current *in gynecology* with safety, and in many cases with considerable benefit. In making this statement he spoke from experience; for the many excellent results which he had obtained with electricity during the past twelve years had been gained under precisely such conditions. Probably the electrologists might call the employment of electricity in this manner empiricism. Perhaps they were right; but he could only ask, was not the whole therapeutical use of the agent to some extent empirical? He should judge so, when he learned from practical electricians that it seemed to make little difference whether the current ascends or descends, or whether the faradic or galvanic current is used, so far as the therapeutical result is concerned, if only the poles be applied in the proper spots and the current be not too strong.

An experience of over ten years' almost daily use of one or the other of the two varieties of electric batteries had impressed him with several cardinal points of practical importance in the use of these instruments in gynecology.

Firstly, he had found the galvanic current far more generally used than the faradic.

Secondly, a mild, steady, absolutely painless current from a galvanic battery answered every therapeutical purpose, and was in every way preferable to a powerful or interrupted constant current, which caused painful shock or gave positive pain. As a rule, the galvanic current should produce no other sensation in the organs through which it passes than a pleasant tingling sensation in the skin to which the negative pole was applied.

Thirdly, when a constant current caused pain, or even momentarily increased the pain which it was intended to relieve, it was doing harm, and should be either reduced in strength or discontinued.

Fourthly, despite frequent inquiries of electrologists and experiments on his patients, he could never decide that it made any difference, so far as the therapeutical result was concerned, which pole—negative or positive—was placed within the body, if care was only taken not to have the current too strong, and the metal was covered by leather, when the internal electrode was connected with the negative pole.

There was one marked exception to this rule, and that was, in case it was desired to relieve pain in a certain circumscribed spot; then it was best to place the *positive* pole next to the painful point. Hence, in pelvic exudations with consequent local or reflex neuralgia, he connected the vaginal electrode with the positive pole, and attached the negative cord to the large sponge on the abdomen, sacrum, or hip, as the case might be.

Fifthly, he had always found it a safe plan to begin with a mild current (the galvanic, say four to six cells, the faradic, as much as the patient can bear without discomfort), and gradually increased to the limit, either at one sitting or day by day, and toward the end of each sitting gradually diminish the current before disconnecting the poles.

Sixthly, when internal electrization was to be employed (vaginal, vesical, or rectal), it was always well to introduce the internal electrodes before closing the circuit, and to break the circuit before removing them, since the contact of the metalicl electrodes with the sensitive skin at the orifices of the cavities mentioned, while the current was at its height, caused acute pain.

Seventhly, whether benefit would be derived from the electric treatment could not be known for some time, except when the faradic current was used to bring on the menstrual flow, the result then being either immediate or, at least, speedy, after one or several applications.

Eighthly, in order to give permanent relief, in fact, in order to derive any appreciable benefit from galvanism, it must be used often, steadily, and for a long time. Thus, less than two sittings a week was merely waste of time; every other day, or even every day, was much better than less frequently, and the sittings should vary from fifteen to thirty minutes each.

Ninthly, but while relief and freedom from pain might be often achieved by galvanism, a permanent cure, a complete absorption of the exudation, and a restoration of the organ to perfect health in hyperplasia, chronic

oöphoritis, cellulitis, and peritonitis, was seldom achieved. But this was unfortunately the case with all other methods of treatment for these obstinate affections, without even the relief afforded by galvanism.

Tenthly, he had seen no bad effects follow the rational and careful use of either form of current. A slight bloody oozing from the uterus after intrauterine electrization might occur, but was of no consequence.

CONDITIONS INDICATING ELECTRIC TREATMENT.

The pathological conditions of the female sexual organs in which electricity would be most likely to prove beneficial were the following: Deficient development of uterus and ovaries; amenorrhœa; dysmenorrhœa, obstructive and neuralgic; superinvolution; subinvolution (with or without menorrhagia); hyperplasia uteri; chronic ovaritis and salpingitis; chronic cellulitis and peritonitis, and lymphangitis; pelvic neuralgia, local and reflex; uterine displacements; erosions of cervix; uterine fibroids; ovarian tumors.

It was not his intention to make more than a passing mention of the tonic effect of the faradic, and the sedative influence of the galvanic current on the general system in the anæmia so frequently accompanying uteropelvic disease.

The author of the paper then discussed at length the use of this remedy in the above affections, and then gave the following *counter-indication*, that the rule to avoid it in all cases of acute or subacute inflammation of the pelvic organs about covered the ground, although there might be exceptions to that rule in instances of mild subacute cellulitis and ovaritis.

The conditions in which the two varieties of the electrical current act most beneficially were summarized as follows:

Faradism.—Deficient development of uterus and ovaries; amenorrhœa; subinvolution and menorrhagia; superinvolution; uterine displacements, and uterine fibroids (interstitial).

Galvanism.—Hyperplasia uteri; chronic ovaritis and pachy-salpingitis; chronic cellulitis and peritonitis, and lymphadenitis; pelvic neuralgia, local and reflex; dysmenorrhœa, neuralgic and obstructive; erosions of cervix; subinvolution, and uterine fibroids (subperitoneal).

The conclusions to be drawn from the experience detailed in the paper were the following:

1. Electricity locally applied was a valuable agent in gynecological practice, and should be more widely used than it was.

2. It did not require special knowledge or experience as an electrologist to be able to use the agent safely and beneficially in gynecological practice.

3. The remedy, if properly used and on correct indications, could not do harm.

4. It should be used only in chronic conditions, and if it was the galvanic current, should give no pain.

5. The conditions in which the faradic current was indicated were chiefly those characterized by deficient development or want of tone of the sexual organs, such as imperfect development of uterus and ovaries, superinvolution, subinvolution, amenorrhœa, uterine displacements, interstitial fibroids. The object of the faradic current was to stimulate the organs to increased growth or activity, and to produce muscular contraction.

6. The conditions in which the galvanic current was indicated were those in which it was desired to promote absorption of adventitious products, chiefly the result of previous inflammation; to allay pain, to excite reparative action, and occasionally to act as a caustic. The rapidly interrupted galvanic current, however, also excited muscular contraction.

7. Perseverance in the treatment was essential to success.

8. Acute and subacute inflammatory conditions, as a rule, counter-indicated local treatment by electricity.

9. The pathological conditions in which electricity proved useful were such as those in which other treatment often failed or could not be borne by the patient.

10. In organic diseases a permanent cure, or a restoration of the diseased organs to perfect health, could usually not be accomplished by electricity, but great relief from pain, and certainly temporary improvement in otherwise intractable cases could be achieved by it, without danger and with comparatively little discomfort to the patient.

Dr. John N. Freeman, of Brooklyn, on invitation, opened the discussion, and said that in nearly every particular Dr. Mundé's paper coincided with his experience. He began the use of electricity with the faradic current twenty years ago, and at that time almost entirely empirically, yet with valuable results in many gynecological cases, and often with disappointment.

Sixteen years ago his old dyspepsia began to be attended by attacks of severe gastralgia, and for the relief of the distressing pain he began, at the suggestion of the late Dr. Geo. M. Beard, the use of electricity, first with the faradic, without much benefit, and then with the galvanic current, and was completely cured. Since that time he had used the galvanic current almost entirely, until he began the use of *static* electricity, with which he had obtained very satisfactory results in gynecological practice. He now employed static electricity in about the proportion of 40 to 1 of all other varieties, and one special advantage was that it could be applied through the clothing.

A special benefit attending the use of electricity was the relief from pain which it afforded, thus obviating the use of opium. For example, gynecological manipulations involving the endometrium were frequently followed by intense pain, but this could be quickly relieved by the application of static electricity.

With regard to electricity in the treatment of fibroids, he had seen the patient referred to by Dr. Mundé very recently, and ascertained that the tumor had not given her any trouble whatever since treatment by electrolysis.

Dr. Freeman related the history of a case referred to him by Dr. A. S. Clark, in which the fibroid was as large as an ordinary-sized cocoanut, to which the bladder was adherent, accompanied by cystitis, and the tumor pressed backward so firmly that constipation was a prominent symptom. He introduced the positive pole into the interior of the uterus, and attached the negative pole to a needle thrust through the anterior abdominal wall into the tumor, using thirty-two cells (galvanic) for a little more than half an hour; no severe reaction followed. At the second sitting, two months later, the fibroid was very much softened and diminished in size nearly one-half. Two months subsequently the tumor was treated again, and two months after the last application the patient was able to be about the house, and now is in excellent health, although there remains some thickening of the anterior wall of the uterus, and she still has some pain. The uterus is about normal in size.

Dr. Freeman also related the history of another case in which there were two tumors, and both were removed by electrolysis. In neither of the three cases did the temperature rise above 99° F. after treatment.

Dr. A. D. Rockwell could confirm in great measure the statements made by Dr. Mundé, and believed, as he had often said, that while electricity was a remedy which had a wide range of usefulness, it should be used with care and caution. In the treatment of the sequelæ of pelvic cellulitis, he was unable to understand how any gynecologist could get along without it, especially for promoting the absorption of old adhesions and thickenings. With regard to subinvolution of the uterus, he would expect theoretically, and had found it so clinically, that galvanism was more beneficial than faradism.

The subject was an exceedingly interesting one to him,

and he had had more or less experience in the use of electricity in all the classes of cases of which the author of the paper had spoken, but time did not permit him to refer to them in detail.

DR. H. J. GARRIGUES said that all were indebted to Dr. Mundé for bringing forward a subject which should receive more attention than it had yet received. He had used electricity more or less in gynecological practice during the last thirteen years, and the chief reason why he had not employed it more than he had done was because the proper application consumed so much time; besides, he had been able to obtain equally good results by the use of other remedies, which could be easily applied with the consumption of less time.

The condition for the relief of which he had resorted to its use most frequently was *amenorrhœa*, although it had not always served him well in those cases; not only where the uterus was defective, but where the condition seemed to be merely functional. The simple introduction of a sound, with the internal administration of iron, had served him about as well as any plan of treatment he had ever adopted.

With regard to the use of electricity in the treatment of uterine fibroids, he had recently read a report by a French author, who had used it with special benefit in one hundred and eighteen cases. As to the hemorrhage, however, which so commonly accompanies fibroid of the uterus, Dr. Garrigues would recommend the use of *cotton-root.*

In the use of the galvanic current he had, with one pole within the vagina, seen unpleasant results by way of producing an eschar, although he had used a smaller number of cells than advised by Dr. Mundé, and also had covered the electrode with several layers of muslin.

DR. W. R. BIRDSALL regarded the literature of the subject as rather mystifying and unsatisfactory. On general principles he had but little to add to the conclusions given by Dr. Mundé, which, on the whole, represented sound views.

One difficulty in studying the question is in ascertaining what observers have used, and how they used it. Better results would be obtained when more exact methods were employed, and until the strength of the current was reckoned by milliamperés, and the galvanometer was employed, science would not get the benefit of good observations and results.

The conclusion reached by the author of the paper, that electricity should not be used in acute and subacute cases, Dr. Birdsall regarded as exceedingly important.

DR. MALCOLM MCLEAN spoke of the efficacy of electricity in the treatment of those cases which, by many, would be regarded as suitable for Tait's operation—an operation performed too frequently, and the benefits of which are not so lasting as has been supposed.

DR. H. J. BOLDT mentioned three cases of metrorrhagia and menorrhagia in which cure was affected by the alternate use of faradism and galvanism.

The discussion was closed by DR. MUNDÉ, who said that the points referred to by those who had participated in the discussion had been discussed in the parts of his paper which, on account of lack of time, he had omitted to read. He had, however, not used static electricity. The main object of the paper was to direct attention to the benefit which might be derived from the use of this remedy, and thus to make it more popular in special and general practice.

ANNIVERSARY MEETING.

THE PRESIDENT announced that Dr. Janeway, on account of ill-health, had resigned his appointment as orator for the anniversary meeting, to be held November 19th.

It afforded him great pleasure, however, to give notice that the anniversary discourse would be delivered by Dr. Henry D. Noyes.

The Academy then adjourned.

FIFTY-EIGHTH CONGRESS OF GERMAN NATURALISTS AND PHYSICIANS.

Held in Strassburg, Germany, September 18 *to* 23, 1885.

(Special Report for THE MEDICAL RECORD.)

NEARLY one thousand of the scientists and physicians of Germany and Austria were present at the opening of the first

GENERAL SESSION,

held in the large hall of the University at Strassburg.

THE ADDRESS OF WELCOME

was delivered by PROFESSOR KUSSMAUL, who dwelt upon the scientific history of Strassburg, and recounted the great names which had been associated with this city from the time, one thousand years ago, when Ottfried sounded God's praises in the German tongue, down to the present. The speaker then summarized the history of the growth of the University from the year 1621, when the Emperor Ferdinand III. raised the then existing academy to the rank of a university.

Other addresses were made by von Hofmann, Sempel, and Virchow. Berlin was selected as the next place of meeting for the Association, and then the session was adjourned, the members repairing to the different halls in which the Sections were to meet.

SECTION FOR INTERNAL MEDICINE.

HERR H. EICHHORST, of Zurich, presented the first paper, on

HEAT RADIATION FROM THE HUMAN BODY

in conditions of health and disease. By means of a delicately constructed apparatus the speaker and Herr Masse had made a number of observations upon the radiation of heat from various portions of the body. They found that this was greater from the trunk than from the face, and from the flexor than from the extensor surfaces. There was no perceptible difference between the two sides of the body. One interesting fact was observed, viz., that there was no obvious parallelism between the surface temperature and radiation. Thus, in a case of epididymitis, although the skin covering the inflamed part was hotter than that on the healthy side, it nevertheless gave out less heat. In fevers, also, the radiation of heat is not invariably increased in proportion to the degree of elevation of the body temperature. Quinine, kairine, cold baths, and other internal and external antipyretics had the effect of greatly increasing the radiation from the body in fevers, and to this, probably in great degree, was due their power of lowering temperature. The speaker exhibited the instrument which had been used in his investigations.

HERR VIERORDT, of Tübingen, had devised an instrument for

MEASURING AUSCULTATORY SOUNDS,

as regards their force and degree of intensity. His investigations had shown that the first mitral tone is loudest of all the heart-sounds, being more than three times stronger than the first aortic sound. He gave the comparative degrees of force of the other sounds also, as he had measured them with this instrument.

HERR STEIN, of Frankfort, exhibited a number of batteries for use in

ELECTROTHERAPEUTICS,

which he considered preferable in many respects to those in common use. He also showed several Edison lamps for illuminating different cavities of the body.

HERR VON JACKSCH, of Vienna, read a paper on the presence of

VOLATILE FATTY ACIDS IN THE URINE.

Normal urine, the author said, contains occasional traces of these substances. In fever there is a consider-

able increase of the fatty acids. Lipaciduria is also seen in liver affections accompanied by destruction of the glandular parenchyma, and in leucæmia. This condition, as well as acetonuria, the speaker believed to be due to increased disintegration of albuminous substances. If the fatty acids—butyric, acetic, and formic—be separated from the urine of healthy individuals or of those suffering from fever or hepatic disease, it will still be possible, by the addition of oxydizing agents, to obtain in all three cases volatile acids.

Herr Schuster, of Aachen, related a case of supposed

MULTIPLE SCLEROSIS OF THE BRAIN AND SPINAL CORD OF SYPHILITIC ORIGIN.

The patient had difficulty in locomotion, oscillation of the eyeball, resembling nystagmus, upon attempted fixation, uncertainty in muscular movements, a feeling of constriction about the body, exaggerated tendon reflexes, and tenderness over the spine. The man presented at the same time unmistakable evidences of syphilis. The nervous as well as the syphilitic symptoms disappeared almost entirely under the use of mercurial inunctions.

Herr Rumpf, of Bonn, read a paper on

SYPHILITIC MONOPLEGIA AND HEMIPLEGIA,

in which he sketched the varying symptoms and sought to explain the uncertainty of prognosis which existed, even when the treatment was apparently most suitable. He then related four cases in which a diagnosis of syphilitic cortical disease was made from the co-existence of monoplegia with spasmodic symptoms, and from the antecedent history. In two there was motor paralysis without any changes in sensation, and in the other two there was no paresis, but a very marked diminution of tactile sensibility, and especially of muscular sense. The first two the author regarded as disease of the motor centres, and the last two as "cortical disease of the sensory area." From a study of these cases he concluded that the centres of motion and of muscular sense were not identical.

SECTION FOR DISEASES OF CHILDREN.

Herr Pfeiffer, of Wiesbaden, read a paper on

RACHITIS,

in which he referred especially to a number of analyses he had made of the milk of women who were nursing rachitic children. In all these cases the older children, as well as the mother herself, presented signs of former rickets. The infants seemed to be well nourished, and the supply of milk was ample. As a rule, the milk differed but little from the normal. In some cases there was a diminution in the proportion of salts. In two there was an increase in the relative amount of calcium salts, and in two others the analysis showed a deficiency in phosphoric acid.

Herr Kassowitz, of Vienna, thought that great caution was necessary in drawing conclusions from these analyses as to the etiology of rickets. In the first place, it should be remembered that the disease was not uncommonly seen in the new-born before they had begun to nurse, and in other cases its commencement was observed in children three or four years of age, who had been weaned long before. He did not regard the phosphorus treatment of rachitis with favor.

Herr Unruh, of Dresden, believed rickets to be a congenital disease, and independent, as far as its etiology was concerned, of the quality and quantity of nourishment received.

Herr Lorey, of Frankfort, asked why the specific gravity of the milk had not been taken. He believed that if the mother's milk was sufficient in quantity and had a specific gravity of 1.030, together with a normal proportion of cream, the child would not become rachitic.

Herr Pott, of Halle, read a short paper on

GASTRO-ENTERITIS OF CHILDREN,

and said that he had obtained excellent results with tincture of coca. He also claimed to have been very successful in the

TREATMENT OF PERTUSSIS WITH COCAINE,

using a five per cent. solution in local applications.

Herr von Dusch, of Heidelberg, thought that cocaine could hardly be curative of whooping-cough, by reason of its transitory effects, but he acknowledged that it was of exceeding value as a palliative measure.

Professor Kohts had used

COCAINE IN DIPHTHERIA,

but was not particularly pleased with the results obtained. In tubercular ulceration of the glottis he had, however, seen excellent effects produced by cocaine in five or ten per cent. solution.

Herr Ranke, of Munich, read a paper on

TRACHEOTOMY IN DIPHTHERIA.

He had operated, in the course of the last seven and a half years, upon 45 cases, 19 of which resulted fatally, and 26 recovered, giving a percentage of recoveries of 57.7. This was regarded as very good for Munich, where previously the mortality following tracheotomy had been very high. The speaker advocated thorough ventilation in these cases, and had two rooms, in one of which were the patients while the other was being thoroughly aired, and the children were changed from one to the other room several times a day. He permitted no furniture in the room except iron bedsteads, a few chairs, and a table or two. The operation was not performed in this place, but in the clinic or at the patient's residence, and then the child was carried to the infirmary in a carriage. Herr Ranke had never seen any evil consequences follow this transportation. He operated early in the disease, as soon as the vocal and respiratory symptoms of laryngeal invasion became manifest. He admitted that some of his cases might have recovered if let alone, but he doubted not that at least ninety per cent. would have died if not operated on. After opening the trachea, he was accustomed to wait a while before inserting the tube, so as, if possible, to get rid of some of the false membrane. During the first few days he used steam without any other medication. The canula was changed only on the third day, as a rule, but if the false membrane formed on the tracheal wound the canula was changed once or twice a day, the wound being then covered with a cloth dipped in a three per cent. carbolic solution, and the canula plunged into boiling water and thoroughly cleansed.

SECTION FOR PATHOLOGICAL ANATOMY.

Professor Orth, of Gottingen, read the first paper, detailing the investigations he had made in regard to the

ETIOLOGY OF ACUTE ENDOCARDITIS.

He said that he was able to affirm that valvular disease of the heart was not always of parasitic origin, for in none of his microscopical examinations of the so-called acute verrucous endocarditis had he discovered any micro-organisms, and culture experiments had likewise given negative results. As to the question of the special form of micro-organism which was concerned in the etiology of parasitic valvular disease, he was unable to answer with certainty. In one case of malignant ulcerative endocarditis, he had found vast numbers of staphylococcus pyogenes aurens. In experiments upon animals he had induced fatal endocarditis by introducing this micro-organism into the circulation, while injections of other varieties of microbes were negative in their results. In these experiments the cocci were found always on the surface, so that it seemed that they were deposited from

the general blood-current and not primarily in the vasa vasorum. They were deposited only in those places where there was an injury to the endocardium, but this injury might be very insignificant and consist only in a slight unevenness of the surface.

HERR VON RECKLINGSHAUSEN stated that he had seen cases of secondary endocarditis in pyæmia and pulmonary phthisis, in which the warty excrescences had formed upon previously normal endocardium.

HERR RIBBERT, of Bonn, then read a paper entitled

THE LOCALIZATION OF INFECTIOUS DISEASES,

in which he attempted to show that certain organs are attacked by the specific microbes because the latter are held mechanically in these localities, and not because, as is more commonly supposed, they find only there the conditions essential to their growth and development. He instanced in favor of this theory some experiments which he had made with the spores of mykosis, which seldom give rise to inflammatory foci in muscular tissue. Thinking that a possible explanation of this dissemination was that the spores were too minute to be arrested in the capillaries of the muscles, he cultivated them for a time, until they had advanced so far in their development as to be too large to pass readily through the smallest vessels, and then injected them into the circulation. He found that then the spores were arrested in the muscular tissue, and as a consequence there were many spots of inflammation in this location. In a second series of experiments the author injected pure cultures of staphylococcus flavus into the circulation, and found that they gave rise usually to a myocarditis, but sometimes also to endocarditis. In the latter case he found, contrary to the experience of the author of the preceding paper, that the micro-organisms were arrested on the valvular endocardium even in cases in which there was no roughening or previous lesion of this membrane.

HERR VIRCHOW said that it was impossible that the microbes could in all cases be carried to the valves solely by the vasa vasorum, for there were portions of the latter, as the chordae tendineæ, which were absolutely non-vascular. But these portions were also frequently the seat of endocardial inflammation, and it was impossible for micro-organisms to be carried to such localities except by the general intracardial blood-stream. He himself, however, had never seen endocarditis following intravenous injections of micro-parasites, although he had made numerous experiments of this nature.

TREATMENT OF ACUTE RHEUMATISM BY COLD SPONGING.—Dr. R. H. Fox, in the *British Medical Journal*, says: "Beshara Bey, M.D., Friends' Hospital, Brumana, Mount Lebanon, in a recent letter to me, described a severe case of rheumatism, in which salicylate of soda, potash, quinine, colchicum, and liniments, all failed to relieve the fever and the pain. Almost in despair, he sponged the patient with cold water, quickly drying the skin afterward. The relief was immediate, and the man was able to walk a short distance to his home in six days from that time. Dr. Beshara wrote that he had used the same treatment in two other cases with success."

ANOTHER CASE OF GONORRHŒA IN A BOY.—Dr. W. W. Greer, of Rockdale, Tex., writes: "In THE MEDICAL RECORD of August 15th is reported a case of gonorrhœa in a boy seven years old. I can beat that record by one year. In October, 1884, while practising medicine in Atlanta, Ga., I treated a negro boy six years old for gonorrhœa. He had been sleeping with a girl seventeen years old, whom I had previously treated for the same disease. The boy was carried before the class at the medical school, and the diagnosis was sustained by Dr. James A. Gray, who had charge of the venereal clinic."

Correspondence.

OUR LONDON LETTER.

(From our Special Correspondent.)

THE COLLEGE OF PHYSICIANS—THE BALY MEDAL—THE HARVEIAN ORATION—DR. QUAIN AND "THE TIMES"—THE COLLEGE MEETING AND THE DOCTORATE—THE FELLOWSHIP OF THE COLLEGE—THE MEDICAL SOCIETY OF LONDON—A NEW THEORY OF FEVER-HEAT—A LIFE DEVOTED TO SCIENCE—THE BEST EDUCATION FOR A PATHOLOGIST.

LONDON, October 24, 1885.

WE have had rather a lively week in London, and the College of Physicians is to the front. In their hall, on Monday, the annual oration was delivered; after which the President presented the Baly Medal to Mr. William Kitchen Parker for his researches in minute comparative anatomy, particularly the anatomy of the skull. The Baly Medal, in memory of Dr. Baly, is awarded once in two years as an acknowledgment of original work or research. In presenting the medal to Mr. W. K. Parker, the President (Sir W. Jenner) complimented him on the work he had achieved while engaged in general practice, and said he could appreciate this as he had begun his own career as a general practitioner.

The oration preceding this presentation is the annual ceremony in memory of Harvey. Dr. Richard Quain was the appointed orator, and took for his subject "The Progress of Modern Medicine." He tried to answer the question, why the profession is so little appreciated, and to vindicate it from the flippant assertion that it has made no advance since the time of Hippocrates; an assertion which was rather a query in the mouth of a deceased politician. Dr. Quain had no difficulty in substantiating the claim he made for progress, since he could point to the microscope, the ophthalmoscope, the laryngoscope, the sphygmograph, etc., as proofs of more accurate work, and could cite chloroform, chloral, bromides, salicin, and other agents as indices to therapeutical triumphs. Besides, was he not speaking to those who used these resources of modern practice? But he had also a larger audience. He obviously spoke to the outsiders, too, and the next morning some of the purists among his dear confrères were scandalized to find a report of his oration in *The Times*, together with a leading article founded upon it. Was it not shocking? Here was evidently a man who would speak to *The Times*, a "lay paper"—and get a report in the "lay press" of his lecture—"quite an advertising dodge." These and still less complimentary remarks were made by gentlemen too pure to hold any communication with the public press. There was no jealousy—oh! no. It was only the honor of the College and the profession that so upset those who have not the opportunity of dining with the editor of *The Times*. If they had that chance—who knows?

Then, again, the College itself has sought publicity—has thrown off some of its old traditions; and, though it still officially condemns every kind of publicity, announces its lectures in the public press, and is generally understood to consider respectable the publishers' columns of the daily papers. What nice distinctions—nay, what ridiculous squeamishness. Or rather it must be that they who have risen in life may do anything, but struggling men must be denied the help by which those who deny them have got up the ladder they are so delighted to kick down.

But there is more about this ancient College. During the week an adjourned meeting has been held to discuss whether, jointly with the College of Surgeons, it might not undertake to confer the doctorate, and a pretty discussion ensued. I have before informed you that London students are practically debarred from obtaining the coveted degree of M.D., which is easily gained by Scotch

and Irish students. This is a monstrous injustice to England, and the wonder is that it has been patiently endured so long. The two colleges having lately agreed to work together, and to give their double diploma; it is suggested that those who thus become qualified ought to be dubbed M.D., or at least M.B. Others think it would suffice for them to be called Dr., without having the liberty of writing M.B. or M.D. after their names. The truth is that the Colleges have no power to grant degrees; and, if they seek a new charter, with extended powers, they may be compelled, as the price, to grant some urgently needed reforms. So some assume the right, and, reposing on the notion that every physician is a doctor, licentiates of Colleges of Physicians use the prefix Dr. It is now proposed that the two colleges recognize this "courtesy Dr." so far as holders of the conjoint diplomas go. This would go far to settle some disputes, but every otherwise legally qualified practitioner would have just as much legal right to such courtesy, and we should all become veritable doctors and real professional brothers. But this enrages the possessors of the University M.D.'s, and that, too, though their university may be inferior. Anything to make a clean sweep of a contemptible bone of contention would be a blessing to the profession, and there is some chance of a compromise being effected, as it promises to replenish the coffers of the College of Physicians; and, after all, it is money which weighs most there. The stupid fiction is still kept up that the Fellowship of that College is obtained by merit, whereas it is the fact that this diploma is given by election of the Council—that is, to those who are personal friends of councillors, or who feast them at dinners, or, being too poor for that, toady them until nominated. As I explained to your readers three or four years ago, there are hospital physicians and lecturers who are still kept out in the cold, while their juniors find the way to become Fellows. Sir W. Jenner was so liberal as to propose to admit a few general practitioners. Had he proposed a simple act of justice to teachers before an act of generosity toward others, his motives would have been less open to misconstruction.

The Medical Society of London opened this week, with an address by the President for the year, Dr. Ord, who propounded a new theory as to the increase of heat in fever. He found increased combustion an unsatisfactory hypothesis, and thinks there must be, with arrested metabolism, no use for the heat which that process ought to render latent, and which therefore remains kinetic. He illustrated his meaning by the facts observed when a metallic vessel containing water is heated. We shall hear much more of this, and it will be a relief to have a different figure instead of the few that have been so worn as to be fairly worn out.

Dr. Ord's dissatisfaction with the prevailing theories started from a statement of Dr. Burdon-Sanderson's, in his paper on "Fever."

This last-named Professor delivered an address at University College last week on "A Life Devoted to Science." The life he took as an example was Cohnheim's, and he gave a précis of Professor Kühne's recent biography of that eminent pathologist. As to such a life in England the openings are few, and Dr. Sanderson said if he were asked how to give up a life to pathology, he would advise the aspirant to qualify for the medical profession, take resident appointments as if he intended to practise, and after that make up his mind whether to do so or to cultivate pure science only.

MEDICAL EDUCATION AND PRACTICE IN HOLLAND.

To the Editor of The Medical Record.

Sir: No country presents more of interest to the average foreigner than Holland, for in its cultivated fields, its many canals, its curious houses with their quaint roofs and chimney-pots, he sees a true picture of the ideal he has conceived from reading and the representation of others. The energetic little people, in their grotesque peasant costumes, seem to be *in* our world, but not *of* it, for the Hollander has a world of his own that has never thrown open its gates to foreign manners and customs; although almost entirely hemmed in by the diverse civilization of England, France, and Germany, it holds its individuality with a methodical, instinctive, self-contented grasp that characterizes the Dutch people. Wherein the individuality of this people lies has been the theme of many books, but the study and practice of medicine in Holland presents peculiarities that have more or less escaped general notice, the narration of which may be of interest.

There are universities at Leyden, Utrecht, Groningen, and Amsterdam. These are all under the control of the Government. The first three are supported by the State. The professors receive their appointments from the State, on the recommendation of the faculty, and generally on their merits. At Amsterdam the university is supported by the city, professors are nominated by the city government, subject to confirmation by the king. At the age of seventy all professors are retired on two-thirds pay. In the session of 1884–85 there were enrolled at all the universities 2,220 students, about one-half of whom, 1,054, were students of medicine.

Generally speaking, we may say that the medical course proper occupies five years. The student, as a rule, is obliged to spend two years at the university studying collateral sciences preparatory to the study of medicine, making seven years at the university. The element of time, however, is not taken into consideration; after passing one examination the student is allowed to present himself for the next, nor is he asked where he acquired his knowledge. They are absolutely free to attend lectures or to remain at home, to study or to play. As a matter of fact, a few get over the course in less time than I have indicated, some remain longer at the university, while a few never get through at all. The course of study differs slightly for those who want the degree of M.D. from that pursued by those who are satisfied with the title of "arts." For the former the preparatory studies are more extensive and the examinations are somewhat harder. These are held by the faculty representing the university, while the "arts" students are examined by a committee appointed from the faculty, who act on behalf of the State.

The following is an outline of the curriculum of study:

Preparatory.—The candidate for the degree of M.D. takes a course of six years at the gymnasium before entering the university, while the "arts" student need spend only four years at the gymnasium, or in lieu of that, five years at the "hoogere burgerschool," corresponding somewhat to our high school; but the student from this high school cannot secure the degree of M.D. unless he at this time pass the final examination of the gymnasium in Greek and Latin, which he is permitted to do without having attended that institution.

The seven years at the university can be divided as follows:

First examination: Mineralogy, physics, chemistry, botany, zoölogy, and comparative anatomy, two years. Students from the high school often pass this examination after one year, because they have had more of these studies than those from the gymnasium.

Second examination: Anatomy, physiology, normal histology, general pathology, and pharmacology, two years. After this examination the future M.D. is called a medical candidate.

Third examination: General and special pathology and histology, pharmaco-dynamics, therapeutics, clinical medicine, surgery, obstetrics, and hygiene, two years. After this examination the medical candidate is entitled to be called medical doctorandus.

Fourth examination, called the "practical arts" examination: Practice of medicine, surgery, gynecology,

obstetrics, pharmaceutics, and ophthalmology, one year. This examination is held by a committee appointed by the Government, and entitles those who pass it to practise medicine in all its branches with the title of "arts." It must be passed by all, as the degree of M.D. confers no right to practise.

Before presenting himself for this examination the student must have had charge of twelve confinements, two of which must have been artificial deliveries. In addition to the above, the M.D. must write a thesis and defend twelve propositions before the faculty, but this may be done before passing the "practical arts" examination. Other medical degrees conferred by the university are Doctor of Surgery and Doctor of Obstetrics. They are given to Doctors of Medicine on passing an examination, writing a thesis, and defending twelve propositions on each subject. These degrees are seldom taken at present, the title of "arts" giving the right to practise in these branches. After passing his final examination the "arts" frequently resorts to Germany, where he can obtain the coveted M.D. degree in about six months. The M.D.'s are for the greater part from the best families; the "arts" are recruited from all sources. Lectures are given mostly in the morning; the afternoon is given to laboratory work, dissecting, etc.; the evening to study or social enjoyment; but the habits of the students vary considerably.

The tuition is $80 a year, for four years, after which attendance at the university is free. There are no private colleges. Private courses, for which extra charges are made, are given only by assistants and private docents.

Holland does not offer the facilities for post-graduate study that some other countries do. For this purpose the Dutch resort to some of the large cities of Europe—Paris, Vienna, and Berlin being favorite places. Foreign students are scarce. An occasional student of ophthalmology is attracted to Utrecht by the names of Professors Donders and Snellen. The former has the chair of physiology, the latter that of ophthalmology. Foreigners are allowed to practise on passing certain examinations. Homœopathy does not exist, but patent medicines and other quackery abound. There is only one lady physician in all Holland, but there are three or four students at some of the universities. Fees in small cities average about forty cents a visit; obstetrics, five dollars. In Amsterdam from forty cents to a dollar is an average for visits; obstetrics, from five or ten dollars up. In wealthy villages most people will pay from thirty to fifty cents a visit; the very poor are treated at the expense of the corporation. Many of the latter are members of benefit societies, that furnish medicines and medical attendance at from one to two dollars a year. There are many of these benefit societies in all parts of Holland. They differ greatly in detail; most are for the poor only; but there are a few which any one can join. In some the physicians are paid a regular salary; in others they get so much a head, eighty or ninety cents per year; while in others the profits are divided between the doctors and the druggists. There are no dispensaries, excepting those connected with the universities. Doctors are not allowed to dispense medicines, unless it be in small places where there are no drug stores.

The local medical societies send one delegate each to the Medical Society of the Netherlands, which meets once a year. The delegates vote according to the membership of the societies they represent. Several medical journals are published. The *Weekly Medical Journal*, the organ of the above society, is the most important. The surgeons of the colonial army have until quite recently been supplied from foreign sources, but of late the State has given aid to medical students on condition that they would enter the service. After passing the first examination at the university the student may make a contract with the Government, by which they agree to serve eight years after graduating. While attending lectures they are entitled to $320 a year, and a like amount after passing each examination. The home army and the navy have always been supplied with native doctors.

The profession is not so crowded as in America, and, on the whole, seems more prosperous, but they envy us our higher fees. FRANK T. SMITH, M.D.

THE VULGARIZATION OF MEDICAL SCIENCE AND THE DISREGARD OF MEDICAL ETHICS IN NEW YORK.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR: It may not appear consonant with the competitive life and advertising enterprise which our facilities in turning out doctors (like "Spanish in six easy lessons") to touch upon the sanctity—for it should be a religion—which should characterize the vocation which is made the recipient of the most delicate, nay the most painful, confidence. Its representatives in distress are looked up to as soul-stricken penitents look up to their Maker. It is possible that there are some physicians who read this who have realized, in the dire suffering of those most dear to them, that I am not grandiloquent nor poetical. Even in remote heathen times the practice of medicine was often conducted with sacred rites. But in this country (*only*, so far as I know) the details and intricacies of disease, complex and perplexing enough to the diligent student of medicine, are held up to the gaping public who gaze upon them with the oblique and dim eyesight of ignorance.

The rasping of the saw upon the bones, the flow of blood, the quivering of the flesh, are described in daily papers with sickening detail. The true physician, the high priest of nature and of the home, if he be true to his calling, does not enjoy such details. He recognizes them, but only as a part of his duty, and not as a sort of magic lantern for vulgar exhibitions. A portion of this letter owes its inspiration to a prominent article in this morning's *Tribune*, headed in big caps: "Removing a Huge Tumor—The Different Steps that were Taken." The article occupies three-fourths of a column. It is an account of an operation at one of our best (the Mount Sinai) hospitals. Here are a few lines from it: "A leaden paleness spread over her face, the muscles of the abdomen contracted convulsively," "her breath came in short sonorous gasps." "A sharp knife" (of course the public, except for this *description* of the knife, might think that dull knives were usually employed in surgery) "was inserted into the flesh at about two inches below the umbilicus," etc. Now in whose interest, *et cui bono*, all this is published it is hard to tell, as, perhaps singularly, the surgeons' and patients' names are not given. I would not descant upon this subject, but there come under my observation constantly other instances of violated medical ethics, etiquette, and humanity. I believe we have in New York the best gynæcologists anywhere, and I, as a general practitioner, avail myself often of their skill, but I know several of the best of them who cannot refrain from telling me the names and ailments of many of their female patients—these same physicians even tell lady patients the names and diseases of other patients.

Now some women suffer so long with the unfortunate complaints to which their sex is subject, that they become indifferent to the nature of their ailments being known, but many of my patients have told me that the gynæcologists whom I recommended told them about this and that lady's complaint, and that naturally enough they thought they were in the same box. These diseases are afflictions, and many women shrink with horror at their being generally known; still, through my patients and through doctors, the amount of knowledge that I profess about ladies I do not treat would be regretted I am sure by many of them.

A physician has no right, even in a thoughtless way, to disclose the names and diseases of his lady patients. It

would not be a bad thing, either, if ladies could go to gynæcologists without meeting with gentlemen in the reception room, the bare fact of ladies being there indicating the nature of their complaint. *Ohe! jam satis!* The signing certificates of wines which are not what is claimed for them, of hypophosphites which are not hypophosphites, of mineral waters which have never been properly analyzed, etc., I will touch upon another time, making due allowance for the fact that the sweetness of dying for one's country is as nothing compared with the sweetness (to many physicians) of seeing their names in the papers.

I have the good fortune, Mr. Editor, to have been known to you for many years, and I know you will credit what I have said. Respectfully yours,

A STRAIGHT-LACED DOCTOR.

NEW YORK, November 2, 1885.

THE MEDICAL CHARITY QUESTION.

TO THE EDITOR OF THE MEDICAL RECORD.

CHARITY ORGANIZATION SOCIETY OF THE CITY OF NEW YORK, November 6, 1885.

SIR: Will you kindly give notice in your next issue that in compliance with many requests from officers in charge of medical institutions the Charity Organization Society invites the medical staffs, and the boards of managers of the several hospitals and dispensaries of the city, to meet at the hall of the New York Academy of Medicine, on Friday, November 20th, at 8 P.M., to confer together concerning the existing abuses and misapplication of medical charity, and to consider how these abuses may be remedied, through the registration system and other facilities of the Charity Organization Society.

Yours very truly,

CHARLES D. KELLOGG,
Organizing Secretary.

Army and Navy News.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from November 1, 1885, to November 7, 1885.

MCCLELLAN, ELY, Major and Surgeon. Leave of absence granted in orders, Cavalry Depot, Jefferson Barracks, Mo., October 30th, is extended seven days. S. O. 254, A. G. O., November 4, 1885.

EBERT, R. G., Captain and Assistant Surgeon. Ordered from Camp Grant, Riverside Park, New York City, to Fort Hamilton, New York Harbor, for duty. S. O. 237, Department of the East, November 5, 1885.

BUSHNELL, G. E., First Lieutenant and Assistant Surgeon. Assigned to duty at Camp Grant, Riverside Park, New York City. S. O. 237, Department of the East, November 5, 1885.

Official List of Changes in the Medical Corps of the United States Navy for the week ending November 7, 1885.

KINDLEBERGER, DAVID, Medical Director. Granted leave of absence to June 30, 1886, with permission to leave the United States.

WIEBER, F. W. F., Assistant Surgeon. To remain on Receiving Ship Vermont until May 15, 1886.

THE TREATMENT OF ASTHMA.—Dr. C. G. Roehr, of Milwaukee, writes that he has successfully treated a number of cases of asthma by means of anti-epileptic remedies. He was led to institute this mode of treatment from observing that most of his asthmatic patients presented a decidedly neurotic history. He asks that others try this method in those cases of chronic asthma in which there is a family history of neurotic affections.

Medical Items.

FRESH PAINT AND ABORTION.—Dr. Llewellyn Eliot, of Washington, D. C., writes: "In the October 31, 1885 number of THE MEDICAL RECORD, Dr. Charles H. French, of Waterbury, requests information on the matter of the odor of fresh paint as a producer of abortions. What the experience of others may be I am unable to state, but my own points very strongly in favor of this as a factor in producing such a misfortune. There are several instances which might be cited in support of this statement. It brings about a 'colica pictonum' with the result indicated. This has been, during the past ten years, illustrated to me in a very forcible manner. Whether the pregnant state renders the patient more subject to the influence of these odors can only be ascertained by the collected evidence of the many, but as one willing to subscribe to this view I record my testimony. It is my practice to discourage pregnant women from moving into newly-painted houses, as well as to deter them from having any painting done in the one in which they live until after the expiration of the gestation." Dr. O. Eugene Larkin, of Deerfield, Wis., November 3, 1885, also writes: "Some weeks ago, I had under observation a primipara in the seventh month, who aborted shortly after moving into a newly painted house. At the time, I attributed it to the improper use of the syringe, although not fully satisfied that that was the cause. Perhaps the odor of paint was a factor in the causation of no small influence."

A NEW HEALTH JOURNAL.—We have received the first number of *Zdrowie* (Health), a monthly journal of hygiene published in Warsaw. It contains several original articles on subjects related to public and private hygiene, and a number of good selections from *The Sanitary Engineer*, and other English, French, and German periodicals. This is the only journal in the Polish provinces devoted exclusively to sanitary matters, and we sincerely hope that its missionary labors in this field will be crowned with success, for it certainly supplies a want long felt.

HEAT AS AN OXYTOXIC.—Dr. J. R. Jones, referring to an article published in this journal, by Dr. Arbery, entitled "Heat as an Oxytoxic," reports in the *Medical Age* a case in which very hot linseed poultices acted successfully in bringing on the pains.

SUING FOR A LARGE FEE.—Dr. Alvarez, a homœopathic physician of Paris, brought suit against the Princess of Medina-Cœli for 600,000 francs, for medical services, alleging that he was entitled to more than the usual compensation because of the great wealth of the defendant. The court awarded him 84,000 francs and imposed upon him the cost of trial. The plaintiff was somewhat chagrined, as he had refused an offer of a much larger sum to compromise the suit.

TOO MANY SURGEONS.—Considerable complaint is made by the French journals over the fact that two new hospital surgeons are appointed every year, while no vacancies exist for them to fill. There are at present, it is said, seventeen surgeons with empty appointments, and the number is increasing each year. The journals ask why the authorities do not cease creating new surgeons for a time, until those already on the list have found something to do to justify the title that they hold of hospital surgeons. But the ways of municipal authorities all the world over are past finding out.

CINCHONA RUBRA IN INEBRIETY.—Dr. D'Unger, of Chicago, Ill., wishes us to announce that Dr. Charles Warrington Earle is an untruthful man, because he has said that cinchona rubra is not a cure for inebriety. We should like to oblige Dr. D'Unger, but cannot do so in this case, owing to our belief that Dr. Earle is not the bad man indicated.

The Medical Record

A Weekly Journal of Medicine and Surgery

MEDICAL LIBRARY OF THE BOSTON CITY HOSPITAL

Vol. 28, No. 21 NEW YORK, NOVEMBER 21, 1885 Whole No. 785

Original Articles.

TWO RARE CASES OF ABDOMINAL INJURY.[1]

BY J. A. STUCKY, M.D.,

[LEXINGTON, KY.]

SURGEON TO ST. JOSEPH'S HOSPITAL; MEMBER KENTUCKY STATE SOCIETY; VICE-PRESIDENT AMERICAN RHINOLOGICAL ASSOCIATION.

I DESIRE to submit the clinical history, as taken from my note-book, of two rare cases of abdominal injury, with recovery in each case. I do so without theorizing or commenting.

CASE I.—On August 4, 1884, at 3 P.M., John C——, Irish, aged thirty-three, while engaged in a bar-room fight received a cut (made with a dirk-blade six inches long) in the abdomen, on right side, extending from the anterior superior spinous process of ilium to just over the symphysis pubis, passing through the abdominal parietes, peritoneum, and almost severing the small intestines in three places. I saw him in a few minutes after receiving the cut. Found him lying on his back on the sawdust-covered floor, the intestines protruding to the extent of six or seven feet and lying on the floor (to his right) in a mass of blood, sawdust, and fecal matter. He had lost considerable blood, but the hemorrhage had about ceased. His body was bathed in profuse clammy perspiration; his expression anxious; pulse, 128. He was given ¼ gr. morphine, with $\frac{1}{150}$ gr. atropia, hypodermatically, and 1½ oz. brandy. He swallowed with difficulty. Mental faculties normal. With the assistance of Drs. R. D. Greene and T. L. Patterson, I dressed the wound in the following manner: After placing the protruded intestines in a basin of carbolized water, and thoroughly washing them, a search was made for the wounds from which came the fecal matter. Three wounds were found. The first was almost a complete division of the cylinder of the gut, only a small portion of membrane holding the cut ends together. This served as a guide in inserting the sutures and bringing the edges of wound close together. The second wound, about eight or nine inches from the first, was a transverse incision about three-fourths of an inch long. The third wound, three inches from second, was a longitudinal incision half an inch long. From each fecal matter escaped. These were closed with sutures of carbolized catgut. The abdominal cavity was washed and sponged out as thoroughly as possible under the circumstances, there having escaped into it a quantity of blood and fecal matter. On account of the great amount of intestine protruding, and the protruding portion being much distended by flatus (the patient being intoxicated, and intestines much distended) it was found impossible to reduce it. The external wound was amply large, there being no constriction. Attempts were made to "gently and carefully press the air back in the abdomen." This failing, a number of minute punctures were made with the point of the scalpel to allow the exit of gas. This accomplished, the reduction of the entire mass was easy. The external wound was closed with an uninterrupted silk suture, rubber adhesive strips and abdominal bandage were applied, and the patient removed to St. Joseph's Hospital. At 6.30 P. M. the same evening patient was resting easy; pulse feeble at 126; slight delirium and nausea; temperature, 98⅘°. Gave hypodermic of morphia, gr. ¼, and atropia, gr. $\frac{1}{150}$, and ordered 5 grs. of subnitrate of bismuth every four hours. On the following morning he was still resting easy; no nausea or delirium; wound looked well, and as if it might heal by first intention. On the fifth day his bowels acted freely, causing no pain or inconvenience. On the sixth day some ulceration at several points of the sutures was noticed. At these points the suture was cut, which caused the wound to gape, necessitating the bringing of the edges together with long strips of adhesive plaster. The wound continued to gape for about an inch near its lower edge, but filled in rapidly by granulation.

On the ninth day he had slight diarrhœa, due to imprudence in diet, which continued for two days. Subnitrate of bismuth and morphia were given to relieve this. The dressing used in this case was Listerine and water (1 to 12). Cloths wet with this were applied every four hours. Patient was kept on his back and liquid food given. On the seventeenth day he sat up, and in four weeks from the date of the injury he was discharged from the Hospital, having made a good recovery without a bad symptom.

CASE II.—On April 27, 1885, William R——, Irish, aged twenty-eight, brakeman on freight train on Chesapeake & Ohio Railroad, in making a coupling of the engine to the train attempted to raise the draw-bar, so that the coupling-link could enter, when the engine pushing back, the coupling-link struck him, and entered at a point about two and a half inches above the crest of the ilium, one inch to the left of the spinal column, and just below the last rib, passing directly through the abdominal cavity. The point came out about three and a half inches above, and one inch anterior to the anterior-superior spine of the ilium. The link is what is known as the "curved coupling-link," and weighs 17¾ pounds, is 5⅛ inches wide, and 18 inches long. The patient states that he was "pinned or coupled between the engine and car several minutes," and when the engine pulled away from him, he placed one hand over the abdominal wound and the other over the wound in his back, and walked to the caboose, a distance of several cars' lengths, where he was placed on a cot and brought to St. Joseph's Hospital, at Lexington, Ky., a distance of twenty-six miles. He was first seen by Drs. T. L. Patterson and W. O. Sweeny, four hours and thirty minutes after the accident occurred.

On examining him it was found that the muscles of the back and abdomen were greatly lacerated; but a close examination of the intestines, liver, kidney, and stomach revealed no injury whatever. The entire hand and arm was easily pushed through the abdominal cavity, thus enabling a minute examination to be made. The intestines were pushed aside, and no appreciable injury done them. The wound was thoroughly washed with carbolized water, and the edges brought together with deep silk sutures, reinforced by thin strips of adhesive plaster. There was very little shock. Morphia and atropia were administered hypodermatically to relieve pain and secure rest.

The following gives an outline of the treatment pursued, as well as the temperature and pulse, beginning twenty-one hours after reception of injury:

Treatment.—The wound having been dressed so as to favor thorough drainage, the patient being kept on his

[1] Read before the Kentucky State Medical Society, at Crab Orchard, Ky., June 26, 1885.

back, morphia, ¼ grain; atropia, $\frac{1}{150}$ grain, given hypodermatically from one to four times a day as required, until the eleventh day. Liquid food—milk, and broths—was the only nourishment allowed. Symptoms of circumscribed peritonitis were noticed on the third day.

Day.	Time.	Temp. Fahr.	Pulse.	Day.	Time.	Temp. Fahr.	Pulse.
2d	9.00 A.M.	100	96	9th.....	9.00 P.M.	101½	113
"	3.30 P.M.	102⅔	120	10th.....	8.45 A.M.	99⅜	116
"	10.00 P.M.	102⅔	130	"	2.00 P.M.	100	102
3d	9.50 A.M.	101⅝	115	"	9.00 P.M.	99⅘	104
"	2.00 P.M.	102⅔	125	11th.....	9.30 A.M.	100¼	100
"	9.00 P.M.	103⅓	130	"	4.00 P.M.	100⅛	102
4th.....	9.25 A.M.	101⅖	125	"	9.00 P.M.	100	98
"	2.30 P.M.	102¼	128	12th.....	9.00 A.M.	99	94
"	5.30 P.M.	101⅛	120	"	4.30 P.M.	99	88
"	10.10 P.M.	101⅘	125	"	8.10 P.M.	99¼	80
5th.....	8.30 A.M.	101⅘	130	13th.....	9.30 A.M.	99	84
"	2.30 P.M.	102⅗	128	14th.....	10.00 A.M.	99¼	90
"	11.45 P.M.	101⅜	120	"	5.30 P.M.	100½	86
6th.....	8.15 A.M.	100	112	"	10.30 P.M.	101	90
"	2.15 P.M.	101	110	15th.....	8.00 A.M.	98⅘	84
"	9.30 P.M.	102½	120	"	6.30 P.M.	101	96
7th.....	11.00 A.M.	101	108	"	10.00 P.M.	99	90
"	6.30 P.M.	103	128	16th.....	9.15 A.M.	98	83
"	10.00 P.M.	103	120	"	10.00 P.M.	98½	80
8th.....	8.00 A.M.	100	96	17th.....	8.45 A.M.	98½	84
"	2.15 P.M.	101¾	125	"	7.00 P.M.	100	86
"	8.00 P.M.	102⅔	116	18th.....	10.00 A.M.	98½	84
9th.....	8.30 A.M.	100¾	102	"	8.00 P.M.	98½	80
"	4.00 P.M.	101⅔	110	19th.....	9.00 P.M.	98½	82

The abdomen became distended, tympanitic, and tender; respiration quick and labored; tongue dry. Warm fomentations were used, and tr. digitalis, 15 gtt., and spts. terebinthinæ, 15 gtt., given every fourth hour for thirty-six hours, when the inflammatory symptoms subsided. On the eighth day the sutures began to tear through the tissues, and a large gangrenous slough filled both wounds. Sutures were removed, and poultices of flax-seed and

FIG. 1.—Entrance of link.

charcoal applied every four hours. Poultices were continued until the seventeenth day, when the slough had entirely separated, leaving healthy granulating wounds. These were thoroughly covered with iodoform and filled with carbolized oakum; the edges of wounds were brought together as close as possible, with a number of long, narrow adhesive strips. A heavy abdominal bandage was used throughout the entire treatment, to give support and retain the dressing. On the twelfth day a fluctuating tumor was discovered pointing over the junction over the lumbar and sacral vertebræ. A free incision gave exit to a large quantity of pus, after this the wound healed rapidly. Tr. ferri mur., 20 gtt., given every four hours until the sixteenth day, when the dose was reduced to 15 gtt., three times a day. On the thirteenth day chloral hydrate, gr. x., and potas. brom., gr. xx., were given to induce sleep. On the same day patient complained of pain in his bowels; an enema of warm soapsuds was given, resulting in two copious stools. After this the bowels acted daily. Appetite improved, and on the eighteenth day he was allowed to sit up in bed.

From this time no medicine but tr. ferri mur., 15 gtt., three times a day, and potas. brom., at night, was given.

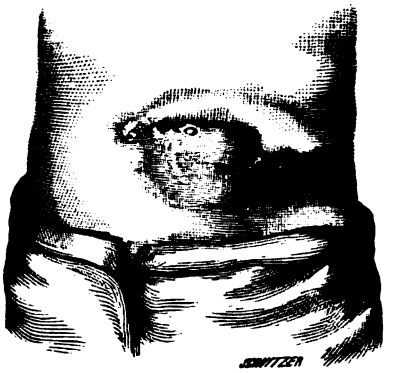

FIG. 2.—Exit of link.

Solid food was allowed, and taken with a relish. The wounds were dressed with iodoform and oakum once or twice daily for several weeks.

Five weeks after reception of injury patient walked to my office, a distance of four blocks, and on the same day was photographed.

The illustrations are made from the photographs. Fig. 1 shows entrance of link, Fig. 2 shows the exit of link, Fig. 3 represents the link.

Remarks.—In Case I. the man was able to go to work (as section-hand on a railroad) seven weeks after receiving the injury. A pad and bandage had to be worn over the

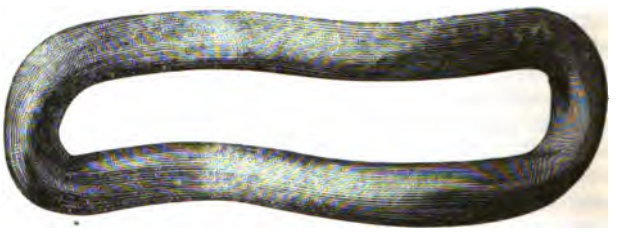

FIG. 3.—Link. Weight, 17¾ pounds; width, 5⅜ inches; length, 18 inches.

seat of injury on account of a small hernia at point of separation of muscular fibres. Union of the muscles was only partial.

Case II. was able to resume work (as brakeman on freight train) three months after receiving the injury. The union of wound in back was complete, that of abdomen incomplete, and a large hernia is the result. With aid of pad and bandage the man experiences no inconvenience in his work, climbing on top of cars, running, jumping, etc.

At this time, November 1, 1885, both men are in good health.

THE NAME OF DR. BENJAMIN RUSH, the distinguished physician, patriot, and philanthropist of Philadelphia, has been on tens of thousands of tongues, and in hundreds of public journals during the last few months. Just one hundred years ago he published his celebrated essay on "The Effects of Ardent Spirits upon the Human Body and Mind." It was an elementary treatise, setting forth the pernicious influence of the strongest alcoholic beverages, and recommending "sudden and entire abstinence" from them. In lieu of ardent spirits he recommended coffee, cider, light wines, beer, and such drinks as could be compounded of molasses, vinegar, maple-syrup and water. His essay was republished in England, and one thousand copies of it were presented to the Presbyterian General Assembly in 1811; the good doctor himself visited various religious bodies and commended his views to them; so that he stands also as the pioneer temperance lecturer.—DR. THEODORE L. CUYLER.

CASE OF CÆSAREAN SECTION AFTER DEATH OF MOTHER.—SUCCESSFUL.

By J. MACK HAYS, M.D.,

OXFORD, N. C.

A short while after eight o'clock on the evening of October 3d, I was hastily summoned to the wife of Mr. C——, living seven miles distant. On reaching the house I was informed that the patient was too far gone for me to do her any good. The following history was briefly given me: About four hours previously Mrs. C—— was in the yard looking after her domestic affairs, and enjoying, apparently, her ordinary good health, when she was suddenly attacked with a violent headache and sent in haste for her husband, at the mill, a hundred yards distant. When he reached the house she told him to send at once for the doctor, as she felt very sick, and her head hurt her terribly; then throwing her hands to the back of her head, fell on the bed with the exclamation, "I can't stand it!"

She was speechless from that moment, vomited frequently for some little time, several times threw her left hand to her head, and sank rapidly into the condition in which I found her. She was evidently suffering from an extensive cerebral apoplexy, presenting the following symptoms: Complete motor and sensory paralysis of left side of body; both pupils widely dilated and totally insensible to a bright light; very slow, stertorous breathing, and "drawing in of the paralyzed cheek with inspiration, and its puffing out with a sort of explosion in expiration;" pulse rapid and barely perceptible; face pallid. A sharp pinch on the non-paralyzed arm produced no evidence of sensation, nor did the hypodermics of whiskey which I administered as a forlorn hope. The patient was rapidly approaching her end, and was eight and one-half months advanced in pregnancy.

I satisfied myself from the husband that the child was probably alive, as he had heard his wife speak of having felt quickening the same day. I then laid the case clearly before the husband, telling him that while one life was fast passing away, another was at stake which might be saved even after the mother had breathed her last. He told me to do as I thought best. Accordingly I made the necessary preparations, and after all evidences of life had disappeared in the mother, and the bystanders sent out of the room, I proceeded without delay with the operation. With one stroke of my scalpel I incised the skin and subcutaneous tissues from the umbilicus nearly to the symphysis pubis; two incisions more, through the linea alba and peritoneum, exposed the uterus to full view; through it I next made an opening as low down as possible, and of sufficient size to admit my two fingers, at the same time liberating the liquor amnii. Using my fingers as a director I slit up the uterus to the placenta, which I easily detected. The body of the child was now fully exposed, lying in the second cranial position. I lifted it from the uterus, and by exerting some little force to overcome the suction brought to bear upon the head, removed a living male child from its dead mother. The cord was tied and cut as usual. The operation was attended with a very slight loss of blood, and that of a dark venous character.

The unusual shape of the child's head, born without any pressure having been exerted upon it, was quite noticeable.

The child is being fed on fresh cow's milk, diluted and sweetened, and at the present writing, October 15th, stands a fair chance of being raised. It makes the fourteenth child born of Mrs. C——, all of whom are living.

I will not inflict upon the reader any remarks upon the foregoing case, nor will I undertake at this time to give a *résumé* of previous operations of a similar nature, but would refer all who may be interested in the literature of the subject to the *American Journal of the Medical Sciences*, October, 1879; *American Journal of Obstetrics*, January, 1879; *Wiener Medical Wochenschrift*, No. 22, 1879; *British Medical Journal*, June 14, 1879; and to the *Index Medicus*, for more recent cases.

My thanks are due Dr. R. P. Harris, of Philadelphia, for kindly directing me in my search after statistics, etc., bearing upon my case.

BRIGHT'S DISEASE OF THE KIDNEYS.[1]

By R. C. M. PAGE, M.D.,

INSTRUCTOR IN DISEASES OF THE HEART AND LUNGS AND GENERAL MEDICINE, NEW YORK POLYCLINIC.

Dr. Richard Bright, of Guy's Hospital, London, first established the fact that albuminuria and dropsy coexisted with renal disease. That occurred in 1827. Since that time the subject has received such universal attention from the medical profession, and is so well known even to the laity, that the term Bright's disease has become a household expression.

Without entering upon the various classifications proposed by different authors, suffice it to say that the disease may be acute or chronic; the latter sometimes resulting from the former, or, more frequently, being chronic from the first. Whatever be the ultimate pathological result, all forms of the disease, except perhaps waxy degeneration, appear to be of an inflammatory nature at the outset. Both kidneys are attacked, and one portion of a kidney may be affected differently from another part of the same organ.

Acute Bright's disease (acute tubal or tubular, parenchymatous, desquamative, catarrhal, croupous, diffuse nephritis, inflammatory dropsy) usually has a well-defined outbreak and a cause not difficult to ascertain. Whatever the predisposition may be, exposure to cold and wet are frequently exciting causes. In these cases the inflammation is usually diffuse. Abuse of alcoholic beverages and exposure incident to intoxication may produce it. Other toxic agents which cause the disease when taken internally are copaiba, turpentine, cantharides, the mineral acids, phosphorus, arsenic, nitrate of silver, lead, and mercury. Sometimes, as is well known, it follows scarlet fever in children. In these cases the inflammation is usually limited to the tubules of the cortical substance, although in severe cases it may extend to the intertubular tissue here and there in spots. Or, coincidently, the child may also have diffuse nephritis from cold, especially during desquamation. Sometimes also it follows diphtheria and epidemic cholera. Occasionally it is developed in the course of measles, and, according to Flint ("Practice," fifth ed., p. 868), in pulmonary tuberculosis, articular rheumatism, typhoid and typhus fever, erysipelas, relapsing fever, acute lobar pneumonia, pyæmia, septicæmia, endocarditis, dysentery, carbuncles, and suppurative processes. Extensive burns are also mentioned by the same author as a cause.

In some cases pregnancy appears to favor the production of the disease, if indeed it does not actually cause it. According to Bartholow ("Practice," p. 482) it occurs not oftener than once in one hundred and fifty pregnancies. It is probable, therefore, that a predisposition exists in these cases, pregnancy being merely the exciting cause. According to the same author it occurs usually in primiparæ, and is more common in twin pregnancies. This accords with my own observations.

All persons are subject to the disease, but it occurs more frequently among children and those under middle life. Men are said to be more subject to it than women, and it occurs sometimes among those who were apparently in previously robust health.

Dropsy is usually the first symptom that causes the patient to seek medical advice. It is probably due to loss of albumen, thus allowing the watery portion of the blood to transude more readily, aided, in some cases, by pressure due to diminished excretion of water by the

[1] Read before the Section of Practice of Medicine, New York Academy of Medicine, November 17, 1885.

kidneys, and the anæmic condition of the patient. Along with this there are pallor of the face, and more or less uræmic symptoms, such as drowsiness, headache, nausea or vomiting, paroxysmal attacks of dyspnœa, temporary disturbance of vision, and the like. These are all readily described by the patient, or those in attendance, without even waiting to be questioned. Upon investigation, however, it will usually be found that, a short time previously, there were chilly sensations, or a distinct chill, followed by more or less febrile excitement. Pain in the back, unless associated with lumbago, is usually absent, but there may be tenderness under firm pressure.

The urine is scant and high-colored, sometimes smoky or even bloody. The specific gravity is higher than normal, sometimes going up to 1.030, or even 1.065 (Roberts), and is loaded with albumen. It contains epithelial casts usually, but there may be also blood and hyaline casts.

The presence of albumen in the urine is probably due to its transudation through the walls of the renal capillaries from increased tension. If rupture occurs, blood also will be found. After structural changes have taken place the albuminuria will continue. According to Cohnheim, however, the albuminuria is due to changes in the epithelium of the glomeruli.

Albumen appears in the urine transiently, and in moderate quantity, in connection with other conditions than Bright's disease. It sometimes occurs in the course of dyspepsia, as in a case that came under my charge five years ago. Dr. Francis Delafield critically examined the urine, and Dr. Alonzo Clark, being called in consultation, confirmed the diagnosis of dyspepsia. The patient completely recovered. The albuminuria was probably due in this case to nervous depression, attended with temporary vaso-motor paralysis and dilatation of the renal capillaries. Occasionally albumen is found in the urine of soldiers after exhausting marches, and athletes, and is probably due to the same cause. Such cases accord with Runeberg's theory of diminished pressure.

There is no possibility of mistaking albumen in the urine for anything else, if the heat and nitric-acid tests be used with proper care. Even in those cases where there is only a trace of albumen, Heller's test is the best. Peptones, and all derivatives of albumen, and vegetable alkaloids, clear up under heat. If Heller's test, therefore, gives a film which remains under heat, it is albumen. Moreover, peptones and the like are of little or no clinical significance, except as indicating dyspepsia. If resinous substances are suspected, alcohol should be added to dissolve them. This occurred several years ago at Professor E. D. Hudson's clinic, where urine had been brought in a vial containing some resinous liniment.

In unfavorable cases œdema of the lungs may occur, also secondary inflammations of serous membranes and the lungs, but these are far more frequent in the chronic form.

Besides the uræmic symptoms already mentioned, there may be convulsions and coma. The cause of these symptoms is also a matter of dispute. The most commonly received opinion has been that they were due to urea retained in the blood. Frerichs believed that the urea was converted into ammonium carbonate by decomposition from the action of a ferment in the blood. This theory, according to Loomis ("Practice," p. 538), has been disproved. According to Oppler, Zalesky, and others, the uræmic phenomena are due to the retention in the blood and tissues of creatine, creatinine, and other extractives, the urea and uric acid being formed by the kidneys themselves, and present in the blood by absorption. On the other hand, Traube considers that the so-called uræmic symptoms depend upon œdema of the brain and cerebral anæmia. Niemeyer (vol. ii., p. 29, Am. trans. eighth Germ. ed., 1881) goes so far as to discriminate between symptoms due to uræmia, and those dependent upon such œdema. Other causes, including cerebral lesions, have been advocated by different authors.

In favorable cases the patient usually recovers in about six weeks. Roberts mentions a case that completely recovered in ten days. The patient may also recover after several months or more.

The diagnosis is usually simple, and the prognosis nearly always favorable, especially if the patient is seen early. According to Roberts, the prognosis is more favorable in the aged than in the young. With others it is just the reverse. The longer the albuminuria continues, the more unfavorable the prognosis, and recovery cannot be said to be complete until it has entirely disappeared.

Regarding treatment, authors prudently recommend that the patient be kept warm in-doors, and in bed, if necessary, and among other means, diaphoretics. Of these I would prefer the hot-air bath or other mechanical means to the administration of drugs, except in the case of marked uræmic poisoning, as will be noticed hereafter. Cups to the loins, with or without scarification, and hot fomentations, are also recommended. Of the two I prefer hot poultices, as they are more comfortable to the patient, and are, I believe, equally efficacious. Unless properly applied and kept hot, however, they are a delusion.

All these means may be employed, it is true, but in the last six cases treated by me at the Northwestern Dispensary, in this city, I have found them unnecessary. The patients were from puberty to thirty-two years of age, and walked to the dispensary for treatment. In all, dropsy was a prominent symptom. One of them, a lad eighteen years of age, was so disfigured by swelling that his most intimate acquaintances could scarcely identify him.

The question naturally arises, Shall we give diuretics? and if so, at what stage of the disease? In cases of tubal nephritis, as is usual when the disease is caused by the infection of scarlatina, I have found that the diuretic treatment alone is sufficient to effect a speedy and complete cure. The diuretic employed is the one recommended by J. Hughes Bennett (potass. acetat., ʒ ij.; spts. ether nitrosi, ℥ ss.; aquæ ad ℥ ij.; sig. ʒ j. t.i.d.)

But in cases of acute diffuse nephritis, as usually occurs among adults from exposure to cold, we have a more serious pathological condition to deal with. The tubules are not merely obstructed with epithelium that may be easily washed out by diuretics, they are effectually blocked by epithelium and exudatory matter within, and without by pressure from interstitial inflammatory products. According to Recklinghausen, the white corpuscles of the blood play an important part in separating the epithelium from the inner surface of the tubules. In this condition I doubt if diuretics are indicated. I prefer to wait until the more acute symptoms have subsided before their positive administration, their use being simply to wash out the tubules.

The first thing I do in such cases is to administer a hydragogue cathartic. It unloads the bowels, relieves pressure on the kidneys, and lessens inflammatory action in those organs, thus preparing the way for diuretics.

After a fair trial in one hundred and seventy-five cases of œdema and general dropsy at the Northwestern Dispensary, assisted by Dr. J. C. Mackenzie, pulvis purgans (pulv. jalap. co.) was found to be more certain and uniform in its action, and better for general use than elaterium, although the latter was obtained from some of our leading drug stores. Elaterium may be invaluable, however, in uræmic coma, owing to its rapidity of action sometimes, and the facility with which it may be given. A drachm of the pulvis purgans may be given, and the dose repeated if necessary.

Deterioration of the blood occurs early, and I usually give twenty drops tr. ferri chloridi in water, every three hours, from the start. According to Roberts, iron acts very beneficially, and hastens in a marked manner the disappearance of blood and albumen from the urine. But he suggests that, when begun too early iron is apt to induce a return of the acute symptoms. On the contrary, where

I have given iron from the first, I have not observed any such effect.

After about a week, when the more acute symptoms have subsided, I combine the iron with tr. digitalis and a bitter tonic (cinchonid. sulph., 3j.; tr. ferri chloridi, tr. digitalis, āā 3ij.; aquæ ad ℥ij. Sig. 3j. t.i.d.). A good milk diet is indispensable. In all my cases the milk was furnished by the New York Diet Kitchen for the Sick Poor.

Should uræmic symptoms become urgent, or convulsions occur, I prefer the hypodermic morphine treatment, as advocated by Loomis (op. cit., p. 542), to the administration of chloroform. Both chloroform and ether may fatally depress the heart, which sometimes acts as it does in shock. It would be interesting here to inquire whether or not renal disease has any bearing on the cause of death that sometimes occurs during the administration of chloroform and ether for surgical operations. The morphine may be given first, and other means employed afterward. In a limited number of cases, however, I have given morphine and pilocarpin together hypodermically, with good results. A grain of muriate of pilocarpin is dissolved in eighty minims Magendie's sol. morph., of which ten minims are injected. The morphine sustains the heart and allays nervous excitement and dyspnœa, while the pilocarpin materially aids in eliminating the poison through the skin. Both indications are thus met at once. The morphine alone may be repeated if necessary, or given in larger doses at first, but great care should be taken not to give large doses of pilocarpin, owing to its depressing effect on the heart.

In the autumn of 1883, I first gave morphine and pilocarpin combined. The case was a boy, aged fifteen years, with a severe attack of bilious remittent fever, and was seen with me by Dr. H. Koplik, of this city. In spite of large doses of quinine the temperature rose to 105° F., the urine became almost suppressed, bloody, and highly albuminous, and the patient delirious, partly from fever, and partly, as I thought, from uræmic poisoning. In less than half an hour after the injection he was bathed in a profuse perspiration, and soon became conscious. The quinine was pushed, and the patient entirely recovered within a week. Should coma occur, elaterium alone, or in conjunction with other means, may be sufficient, as occurred in a case at Bellevue Hospital seventeen years ago. By order of Dr. Austin Flint, Sr., I gave the patient, who was a man about thirty-five years, two grs. of Clutterbuck's elaterium. He was made to swallow by manipulating the larynx, but it may also be given with a tube. The remedy proved successful and the patient left the hospital afterward, much improved, though not cured.

After a complete cure of acute Bright's disease, the patient should be made to understand that care must be taken for a long time not to bring on a relapse by acts of imprudence. Temperate habits, and comfortable, but not too warm, clothing are necessary.

Chronic Bright's disease may assume one of three typical forms, according to the renal elements affected. 1. The tubules. 2. The interstitial tissue. 3. The blood-vessels. Or there may be, and generally are, mixed cases in which all these anatomical elements become more or less involved.

1. Chronic tubular (parenchymatous) nephritis may result from one or more acute attacks, or generally it is chronic from the first. The kidney is large, smooth, and white, the changes occurring chiefly in the cortical portion; or it may subsequently undergo collapse from disintegration of the tubal elements and become smaller than normal. The etiology in general is the same as that of the acute disease, but is often obscure. It may occur at any age, in both sexes. The symptoms are more marked than in any other form, dropsy being prominent and the face pale and puffy. There is also more liability to secondary inflammations of serous membranes, and uræmic symptoms. The urine is scant, above normal sp. gr., and high colored. It is loaded with albumen and contains fatty and hyaline casts. Dyspnœa, besides paroxysmal uræmic attacks, sometimes occurs, due to œdema of the lungs, or other intercurrent affection of the organs of respiration or heart. Besides temporary disturbance of vision due to uræmia, there may occur neuro-retinitis, to be detected by the ophthalmoscope. Cardiac hypertrophy, with or without valvular lesions, sometimes occurs. The valvular lesions may be due to some previous disease, or developed during the renal affection. Simple hypertrophy of the left ventricle without valvular lesion may exist, but it is more frequent in connection with cirrhotic kidney.

2. Chronic interstitial nephritis is productive of the cirrhotic kidney. The organ is red and smaller than normal, due to shrinkage of the cortical portion, and also the tissue between the pyramids. The disease is chronic from the first, and occurs usually in men past middle life. It is caused by habitual intemperance, gout, rheumatism, syphilis, chronic lead-poisoning, and the like. Often the etiology is obscure or unknown. It begins insidiously, and may have existed months before detection. There is generally little or no dropsy. A slight fulness under the eyes (called *pods* by the laity), and, perhaps, about the ankles, may be all that the closest inspection can reveal.

The urine is abundant, pale, and of a lower specific gravity than normal. It contains but little albumen, and at times may be entirely free from it. The casts are hyaline and granular. From a fit of intemperance, or other cause, acute tubular nephritis may supervene with its usual symptoms, notably dropsy and albuminuria.

Simple hypertrophy of the left ventricle, without valvular lesion or degeneration of muscular fibre, often occurs in this form. According to Traube, it is owing to increased resistance to the renal circulation, but Bartholow (p. 496) and others consider additional obstruction in the arterioles throughout the body due to hypertrophy of their muscular layer. Neuro-retinitis, apoplexy of the retina, and even of the brain, may occur in this form.

3. Lastly, we have waxy (lardaceous, amyloid) degeneration of the kidney. The afferent vessels of the glomeruli are primarily affected, and it is secondary to some other pre-existing wasting disease, as caries, phthisis, syphilis, and the like. I have observed it mostly in connection with the last stages of pulmonary consumption. Parenchymatous nephritis usually supervenes, and it is attended with more or less dropsy.

Regarding treatment, little or nothing can be done in case of waxy kidney. In chronic tubular (parenchymatous) nephritis, treating symptoms may become necessary, a general outline of which was given in the acute disease. Pricking the skin for the relief of dropsy is not to be thought of, and bandaging may contribute to œdema of the lung, as in a fatal case reported by Dr. D. H. Stewart, of this city. The repeated use of pilocarpin as a curative agent has not, in my experience, been justified by results. As a temporary makeshift for uræmic poisoning, when combined with morphine, I believe it worthy of further trial. In cirrhotic kidney, if the patient had syphilis, potassium iodide, with or without the mercuric chloride, or, in case of chronic plumbism, the potassium iodide alone may be given. In a number of cases I have given small doses of the mercuric chloride in some bitter tonic, after the plan in vogue at the old New York Hospital, 1867–68, but without permanent benefit. Iron and bark, with or without digitalis, are recommended. Paroxysms of uræmic dyspnœa, occurring in any form of the disease, may be relieved by hypodermic injections of morphine, as I witnessed at Bellevue Hospital, 1868, in Dr. Loomis' service. The diet should be nutritive, consisting largely of milk. Clothing should be comfortably warm, and the patient should winter, if possible, in a warm, dry climate. With the best treat-

ment, however, and every precaution, although the patient's condition may be improved and life prolonged, the tubular (parenchymatous) form of chronic Bright's disease is the only one ever cured, I believe, and even here recovery is very rare.

31 West Thirty-third Street, November, 15, 1885.

A CASE OF ACUTE GENERAL TUBERCULOSIS DIAGNOSTICATED, DURING LIFE, BY THE PRESENCE OF TUBERCLE BACILLI IN THE SPUTUM.[1]

By EUGENE HODENPYL, M.D.,

HOUSE PHYSICIAN, ST. FRANCIS HOSPITAL, NEW YORK.

Joseph K——, aged thirty-five, a truck driver, was admitted into the St. Francis Hospital, New York, March 16, 1885. His family and previous history were good. Was a moderate drinker; had gonorrhœa once; no evidence of syphilis. Patient stated that two weeks before admission he developed, without apparent cause, a moderate cough, at first without expectoration, accompanied with fever, loss of appetite, and exhaustion.

On admission the rectal temperature was 104⅘° F.; pulse, 100, and somewhat feeble; urine normal. He had a slight cough, and occasionally expectorated a small quantity of tenacious mucus. He was very apathetic, and the expression of his face was dull and stupid.

Physical examination revealed a moderate degree of bronchitis, most marked posteriorly. The liver was somewhat tender on pressure, and the spleen was slightly enlarged. The bowels were regular until the last few days of the disease, when there was diarrhœa with incontinence of urine and fæces. While in the hospital, his temperature was extremely irregular, varying from 100° to 106° F. At no time did he complain of pain. His bronchitis remained moderate. The apathy gradually merged into coma, which was complete at the time of his death, April 16th.

On April 3d a small quantity of the expectoration was obtained, with difficulty, and was found to contain tubercle bacilli in moderate numbers. A diagnosis was then made, based first upon the presence of tubercle bacilli in the sputum of the patient who gave no indications of phthisis. Secondly upon the very indefinite character of the clinical symptoms.

Autopsy.—Brain and meninges normal. Heart smaller than normal in proportion to the size of the body, and in the cardiac muscle were several miliary tubercles. Lungs: There was a catarrhal inflammation of the smaller and medium-sized bronchi. Scattered throughout both lungs were an enormous number of rather small, sharply outlined miliary tubercles. In the apex of the right lung was a nodule about the size of a walnut, apparently composed of dense connective tissue.

The bronchial glands were enlarged and the seat of a tubercular inflammation. Portions of them were in a condition of cheesy degeneration, forming semi-fluid masses. The liver, kidneys, diaphragm, and omentum contained miliary tubercles; also the spleen, which was enlarged and soft.

Microscopical examination.—The tubercles in the lungs are irregular in shape and frequently merge into one another. Microscopically, they consist in general of groups of air-vesicles and smaller bronchi, whose outlines are still fairly distinct, and are filled in part with tubercle tissue, and in part with a dense structureless, cheesy material. The air-vesicles in the periphery of the nodules show desquamation and proliferation of the vesicular epithelium. So abundant are the tubercles, and so extensive the peripheral inflammation, that on section of the lungs somewhat more than one-half the air space is solidified. Giant cells appear to be entirely absent from these pulmonary tubercles. Tubercle bacilli were present in very large numbers. These tubercles, as will be seen from the above description, are similar to the miliary tubercles frequently found in the lungs of children, and which usually contain great numbers of tubercle bacilli. In children they are sometimes called pneumonic tubercles. Microscopically, the tubercles in the other internal organs presented no morphological features worthy of remark.

Remarks.—The difficulty of diagnosis in cases of acute general tuberculosis is so great, that at the time of Koch's announcement of the discovery of the tubercle bacillus, it was hoped that in this disease, as in phthisis, examination of the sputa might furnish us with a definite means of diagnosis. Thus far, however, the examinations of sputum which have been made in this disease have given negative results, no tubercle bacilli being found. Recourse was accordingly had to examinations of the blood[1] from the spleen, removed by puncture. This procedure has proven successful.

The above case seems worthy of record, because examination of the sputum did show tubercle bacilli and upon the result a diagnosis was possible. The recorded cases are too few to enable us to say whether this result is exceptional or not; for the difficulty of obtaining suitable sputum, and the short duration of the disease, together with the uncertainty which always exists in examinations for tubercle bacilli when they cannot be repeated in case of failure, would readily explain negative results.

It should be borne in mind as possibly bearing upon this case that the tubercles in the lungs were not of the type usually found in adults, but were loose in texture, exceedingly abundant, intimately connected with the bronchi and contained unusual numbers of tubercle bacilli. In regard to the source of immediate infection, it was undetermined, as unfortunately the vessels at the bases of the lungs (pulmonary veins and thoracic duct) were not examined, but the tubercular bronchial glands furnished conditions which, according to the researches of Weigert[2] would serve as a focus of infection.

In whatever relation the above-mentioned nodule of connective tissue at the apex of the right lung may have stood to the present acute disease, its firm, dense character, and the absence of any other phthisical process whatever in the lungs, would seem to preclude the possibility of the bacilli coming from any other source than the acute lesion.

43 Seventh Avenue, Brooklyn, N. Y.

[1] A contribution from the laboratory of the Alumni Association, College of Physicians and Surgeons, New York.

[1] Alexander Lustig: Wien. Med. Wochensch., 1884, xxxiv., 1429-1431. Weichselbaum: Vortrag gehalten am 29 Feb., 1884, in der K. K. Gesellsch d. Aerzt in Wien. W. Meissels: Wien. Med. Wochensch., October 1884. Rutimeyer: Centralbl. f. klin. Med. Leipzig, 1885, vi., 353. G. Sticker: Ibid. vi., 441.

[2] Phila. Med. News, July 5, 1884. Verbreitungswege der Tuberkelgift. Jahrbuch für Kinderkrankheiten, 1884, 21-146. Wege der Tuberkelgifts su Serösen Häuten, Deutsche Med. Wochenschrift, 1883, ix., 453.

Preventive Inoculation by a Russian Priest.—A Siberian journal states that in 1868, when the plague was killing all the cattle in the country, Father Andrew Joakimansky, of the Troitzky village, resorted to a desperate means in order to save his cows. He got some blood from a dying cow, saturated threads with that blood, and passed these threads through the ears of the healthy cows, numbering eleven. At the place where the ears were punctured there appeared tumors of the size of pigeon eggs. In a short time these tumors disappeared, and the cows remained alive and healthy, though the rest of the cattle of that village perished.

The French Association for the Advancement of Science.—The next meeting of this Association will be held in 1886, at Nancy. The session will be presided over by M. Friedel, the vice-president of the Grenoble meeting. Dr. Rochard has been elected vice-president for 1886.

Clinical Department.

TEETH IN A NEW-BORN CHILD.

Dr. T. A. O'Callaghan, of Worcester, Mass., writes that Mrs. H—— gave birth in January last, to her seventh child, a large healthy boy. Pain on nursing suggested to the mother an examination of her child's mouth, when she discovered the two lower incisors protruding from the jaw fully one-sixteenth of an inch. These two teeth still remain, are perfectly sound, and differ in no way from their companions which have since appeared, except that they are larger.

COCAINE IN HAY FEVER.

Dr. W. Cheatham, of the University of Louisville, Ky., writes that he has had quite an extensive experience in this direction during the past summer, and has been well satisfied with the results obtained. Nearly all the head symptoms are relieved by applying a cocaine solution to the anterior two-thirds of the nasal cavities, and in the few cases in which the itching and discomfort about the eyes still remain, they are relieved by occasionally dropping the solution on the conjunctiva. In this case, since cocaine dilates the pupil and affects somewhat the accommodation, eserine sulphate may be added in the proportion of $\frac{1}{100}$ grain to a drachm of the four per cent. solution, or $\frac{1}{200}$ grain to the same amount of a two per cent. solution. The asthma is readily and entirely relieved by making an application to the posterior ends of the inferior turbinated bones, to the pharynx, and in some cases to the larynx also. These two sensitive areas, Dr. Cheatham says, have not, as far as he knows, been noticed by writers on the subject, but he has found that the pharynx is implicated in most cases, and the larynx in a few. In applying the drug to the nose a piece of absorbent cotton, large enough to reach to the posterior extremity of the inferior turbinated bones, and to fill comfortably the middle meatus, is wet with the solution, introduced and allowed to remain about twenty minutes. In some cases, however, in addition to this and dropping into the eye, applications must be made to the soft palate, pharynx, and occasionally to the larynx, in order to reach the several sensitive areas and control the asthma. Dr. Cheatham relates several illustrative cases in which confirmed hay fever subjects were relieved of all their distressing symptoms by cocaine. In several young patients great comfort was obtained by the use of a strong infusion of coca leaves in an atomizer. Boroglyceride was added in the proportion of one ounce to the pint of infusion in order to preserve it. The writer concludes by expressing the belief that many, probably the majority, of hay fever sufferers can remain at home without any marked discomfort, if taught to use cocaine properly. And most of the remainder can also do so by submitting to active treatment designed to correct the nasal hypertrophy, deflected septum, polypus, or other affection to which many of them are subject. The best treatment for these conditions is cauterization by chromic acid, the galvano, or the actual cautery.

THE ANTIPHLOGISTIC ACTION OF MENTHOL.

Dr. Selwyn A. Russell, of Albany, N. Y., writes to call attention to the use of menthol as an antiphlogistic and anodyne remedy in superficial inflammations, in which, he says, its effects are truly remarkable. "My discovery of its value in such conditions was quite accidental; a patient who was suffering from acute aural perichondritis, failing to obtain relief from the usual anodyne applications, bethought himself of menthol which he applied by means of the ordinary pencil; the relief from pain was immediate, and from that time, to my surprise, the inflammation quickly subsided. I have since made frequent use of it, and I believe inflammations have aborted which, without it, would have ended in abscess; and in addition the pain, itching, heat, and swelling have been considerably reduced. I have used the ethereal solution (alcohol is also a good solvent) in the strength of from ten to fifty per cent., applying it by means of a camel's-hair pencil. The applications may be made two or three times a day, or more or less frequently according to the indications. A solution in one of the fixed oils may be used on mucous membranes. I have observed the good effects of menthol more especially in boils, carbuncles, excessive inflammation following vaccination, etc. The employment of this substance in superficial neuralgias, for its anodyne effect alone, is often very satisfactory, but its use in this way has been noticed and written upon by others."

COCAINE IN OPERATIONS ON THE PREPUCE.

Dr. Charles Graefe, of Sandusky, O., writes: "Apropos of Dr. Bruce's article in The Record of October 31st, I should like to describe a case I had last March. A young man came to my office desiring relief from a phimosis, and as the foreskin was not much lengthened, though constricted, I decided to operate after Roser's method of incision. Preparatory to the operation, I rubbed a five per cent. solution of oleate of cocaine, and during the time it took to get my instruments and thread my needles, I had the patient hold a small piece of cotton saturated with the same solution along the proposed line of incision. During the operation, which was completed in about ten minutes, the patient experienced no pain, and even held the cutaneous and mucous layers together while I sewed them. He afterward said that he experienced more during the removal of the sutures than he did when they were put in."

ABNORMAL MOBILITY OF THE TONGUE.

Dr. T. F. C. Van Allen, of Albany, N. Y., reports another case of the above. S. A——, now a practising physician, was a student at the time when he kindly permitted me to examine his fauces. He had never suffered from more than an occasional "sore throat," nor had he ever developed the mobility of his tongue by practice. The tongue, fauces, and palate appeared to be perfectly normal. He could with perfect ease place the tip of his tongue into the naso-pharyngeal space, and apply it to the openings of the Eustachian tubes, to the vomer, and turbinated bones.

RESECTION OF THE ANKLE-JOINT.

Dr. C. S. Van Riper, of Paterson, N. J., reports the following case of resection of the ankle. The patient, a German woman, thirty years of age, was admitted to St. Joseph's Hospital, suffering from disease of the ankle-joint. She stated that one afternoon, some twelve weeks previously, she had experienced a dull, aching pain in the heel for a time. This pain came and went for a few days, and finally became persistent, and was accompanied with swelling. Both ankles were affected at first, but after a time the trouble appeared to centre on the left side. On admission to hospital, the ankle was found much inflamed, having a brawny appearance, and presenting a point of fluctuation over the external malleolus. A diagnosis was made of fungous arthritis, and it was decided to resect the joint. An incision was made on either side, from a point about two inches above the end of the malleolus downward over this process and on the side of the foot, in a curved line, to about two inches below the tip of the malleolus. The lateral ligaments

were divided, and then, the posterior tibial artery and the tendons of the flexor longus digitorum and tibialis posticus being protected by a retractor, the internal malleolus was divided by bone-forceps, and removed. The foot was then firmly grasped by the hand, and luxated toward the inner side, exposing the articular surface of the tibia and the external malleolus. A thin layer of bone from this surface was removed by the saw, and the diseased portion of the astragalus gouged away. The foot was replaced, and, a decalcified bone drainage-tube being inserted, the wound was closed by interrupted sutures. The foot was then immobilized by means of a splint, consisting of galvanized iron foot- and leg-pieces, joined by a stout iron bar, curved so as to permit of the application of the dressing to the wound. The splint, being well padded with felt, was attached to the foot and leg by a plaster-of-Paris bandage. When this had become firm, the wound was syringed out with a sublimate solution of the strength of one to three thousand, dusted with iodoform, and enveloped in an antiseptic dressing, and the limb suspended from a horizontal bar passing over the foot of the bed. The dressings were changed every eighth day, and at the end of two months the wound was entirely healed, and the patient allowed to leave the bed, the ankle being protected by lateral supports attached to the shoe. The operator was assisted during the operation and in the after-management of the case by Dr. Carroll, the house-physician to St. Joseph's Hospital, to whom he desires to acknowledge his indebtedness. The patient is now able to attend to her work in the mill, but uses a cane when walking in the street, as she is afraid of stumbling. The removal of the internal malleolus, and luxation of the foot, the writer says, render the operation more easy of performance, and reduce the risk of injury to the posterior tibial artery to a minimum, since this vessel is not put on the stretch.

Progress of Medical Science.

THE USE OF CARBONATE OF AMMONIA IN CEREBRAL HEMORRHAGE, THROMBOSIS, AND EMBOLISM.—Dr. R. C. Van Wyck, in *Gaillard's Medical Journal*, claims the following advantages for the carbonate of ammonia in the treatment of cerebral hemorrhage, thrombosis, and embolism: 1. As a diffusible stimulant to the general circulation, relieving the anæmia which is present in the brain, increasing the cutaneous circulation, and inducing perspiration—relieving in this way intercranial pressure. 2. By its direct action in dissolving the clot. The only agents which possess this property are the alkalies, and the most effective of these is ammonia. 3. In œdema and congestion of the lungs, so often seen in apoplexy, the use of this salt will often relieve the existing condition, partly by its stimulating action on the terminal capillaries, and also by its expectorant action on the broncho-mucous membrane. 4. By keeping up the alkalinity of the blood, and preventing further thrombosis. I do not claim this drug as a specific, but only an auxiliary to other remedies. In the treatment of a case of cerebral hemorrhage, the following would seem to me the order of treatment: 1. The prodromal symptoms which threaten an attack of apoplexy, by prompt venesection and catharsis. 2. To relieve the period of reaction, after paralysis has taken place, by arterial sedatives, preferably aconite. 3. To remove the exudation and all retrograde changes in the clot, anæmia, pulmonary congestion, and further thrombosis, by the free use of carbonate of ammonia. 4. To support the system by nourishing yet unstimulating diet, and by the use of medicines which nourish the brain tissue, such as syr. lacto-phosphate of lime, cod-liver oil, and the phosphide of zinc. 5. To increase the muscular development by massage-frictions, electricity, and strychnia. The carbonate of ammonia should never be given in cerebral hemorrhage until the period of reaction has fully taken place, say from ten days to two weeks. It should then be given continually for at least a month or more, or until the retrograde changes in the clot are accomplished. In thrombosis and embolism, if the diagnosis can be clearly made, it should be given at once. The dose used was five grs. three times daily in ʒ ss. of the solution liquor ammoniæ acetatis. There is one class of cases in which the carbonate of ammonia has not acted well in my hands, viz., cerebral hemorrhage associated with interstitial nephritis and hepatitis. In these cases I have had good results from the phosphate of sodium twenty to thirty grains, three times daily in the infusion of dandelion, given after meals, and small doses of corrosive sublimate, $\frac{1}{24}$ gr. three times daily before each meal. I have sometimes combined it in a pill with digitalis and squill.

READY METHOD OF APPLYING DRESSINGS TO THE PERINEUM.—In *The Lancet*, October 3, 1885, Dr. Laffan draws attention to a ready method of applying dressings to the perineum. His advice is as follows: Take an ordinary elastic cricket-belt. Buckle it round the waist next the skin. Any handkerchief tied before and behind passing between the legs will furnish a perineal bandage, for which he claims the following advantages: The belt, being elastic, yields readily to any strain, and thus accommodates itself to all changes of posture, without altering the position of the handkerchief with reference to the part whereon the dressing is applied. It is to be found in almost every house; it is easily adjusted; and it does not in any way interfere with locomotion, or with the free movement of the abdominal muscles.

THE ETIOLOGY OF ASTHMA.—The dependence of some forms of spasmodic asthma upon the presence of nasal polypi or other morbid conditions of the naso-pharyngeal tract, has been of late much discussed in Germany. A wider view is that taken by Dr. Schadewaldt, who declares that for some years past he has been convinced that genuine spasmodic asthma is due to reflex excitation from a hyper-sensitive nasal mucous membrane, whether there be any anatomical change visible or not (*The Lancet*, October 3, 1885). If this conception of asthma as a "nasal trigeminal neurosis" be held, so that the sphenopalatine ganglion is regarded as the special asthma centre, he thinks that a sufficient explanation is given of the violent phenomena of the paroxysms. In severe attacks an excessive degree of reflex excitability may be overlooked; and it must be borne in mind that a hysterical temperament especially favors asthma. He further thinks that if this doctrine be accepted, an advance may be made in the treatment of asthma, and is surprised that the nasal symptoms characteristic of the affection have been so long disregarded. Upon this we would remark that undoubtedly in some cases true spasmodic asthma is preceded by, or the paroxysms alternate with, violent attacks of sneezing; but, on the other hand, there is often no pronounced disposition to bronchial asthma (at least in its well-marked and severe form) evinced by the sufferers from "hay asthma," which must surely be regarded as a marked instance of "trigeminal neurosis." Dr. Schadewaldt, however, adduces other arguments in support of his view, and indicates a method of diagnosis by excitation of the nasal branches of the fifth by means of the nasal sound. He asserts that fumigation of belladonna or stramonium leaves soaked in strong solution of nitre forms the best means of calming the asthmatic paroxysm, and is far better than smoking, unless the fumes are inhaled into the nostrils. Facial neuralgia or headache often follows the subsidence of the asthmatical paroxysm; and this he adduces as another proof of the trigeminal nerve being the origin of the disturbance. Physicians will be grateful for any fresh light that is thrown upon the nature of spasmodic asthma, and especially upon the possession of remedies which will have a more lasting effect than any now in vogue. Perhaps if attention be directed to topical medication—by means of

pencilling or snuff-taking—of the nasal mucous membrane rather than of the whole respiratory tract, a more certain method of relief may be found, at least in those cases where it is impossible to assign any other source of reflex irritation.

Is Alcohol a Food?—Regarding the much-disputed fate of alcohol in the animal system, Professor Cloetta recently published some original investigations. The conclusions he arrives at are: That alcohol becomes converted in the system into carbon dioxide and water; that only a very small proportion passes off as alcohol by the lungs, kidneys, and skin, and that nearly the whole of the quantity consumed becomes oxidized. None is found in the fæces or milk. In moderate doses it has no influence on the body heat, and it only lowers it when taken rapidly and in large quantity, the effects being the same whether fever is present or not. In the tissues, in consequence of absorption of oxygen by the alcohol, tissue metamorphosis is checked, and the essential constituents of the urine are diminished. Alcohol is in so far a food, that it protects against too rapid consumption. It is thus an important agent in febrile cases in daily divided doses of five to seven drachms. In larger doses its importance as a nutrient and conserving agent recedes, and its effects become injurious, and accumulation of the terminal products of tissue metamorphosis takes place, along with increase of uric acid and urea. This fact indicates that oxidation in the tissues has its limits, and that the terminal products of tissue metamorphosis may be produced in other ways.—*Medical Press*, October 21, 1885.

The Treatment of Cephalocele and Spina Bifida.—A paper by Professor Schatz, of Rostock, on the respective advantages of expectant and operative treatment of cephalocele and spina bifida, is of some interest when considered in relation with the report lately presented to the Clinical Society by its Spina Bifida Committee. Taking as his text the expressed opinions of Heinecke and Steffen, both of whom speak in gloomy terms of the prospects of success after any radical operation, he presents a list of cases of encephalocele to illustrate the relative prognosis with and without operative interference. Of 105 cases, 59 were occipital and 46 frontal in position. Of the former, 24 were left untreated, and only 3 recovered, 35 were operated upon by incision, injection of iodine or ligature, with 6 recoveries. Of the frontal encephaloceles, 6 out of 32 survived without treatment, and only 3 out of 14 cases after operation. A few cases of spina bifida, quoted from Lorinser, show much the same proportion of success, and, in the opinion of that author, justify the view that no operative interference should be attempted when it can be clearly shown that a communication exists between the sac and the vertebral canal. Professor Schatz himself considers that operation is only justified when there is no such communication, and when the tumor is covered with healthy skin, is fully translucent and not painful. In other cases, however, he would endeavor to secure the isolation of the tumor from the arachnoid cavity by means of graduated constriction or pressure calculated to set up a process of plastic adhesion, when applied to the base or pedicle, if there be one, of the tumor. He relates the particulars of three cases in which he operated by emptying and removing the sac, the base or pedicle of which was firmly secured by means of a long clamp, such as is at times used to secure the stump of an ovarian tumor. His first case was one of spina bifida, and was not successful in saving the life of the child. In the second a large encephalocele was successively emptied and removed with but little disturbance of the child's health, life being prolonged to the eleventh year. The symptoms and physical signs of internal hydrocephalus were, however, always present, and gradually increased, the child remaining paralyzed in the lower limbs and of very feeble intelligence. In the third case, a series of encephalic protrusions were in like manner clamped and removed, and notwithstanding the great extent of the hernia, the case, after some suppuration and many fluctuations of temperature, ultimately recovered, and is still living, although with a steadily increasing hydrocephalus. All these cases were in themselves severe, and hence the merits of the operation must be considered apart from them: it is possible, however, that the method of compression by clamps, when applied to the more simple cases of the kind, may be found to enhance the chances of success to a very considerable degree.—*Berliner klinische Wochenschrift*, No. 28, 1885.

Ptomaines.—Professor L. Brieger, of Berlin, has recently published a monograph in which he gives the results of his own researches into this interesting subject. From fibrine digestion he obtained a poisonous substance named by him *peptoxi*. It crystallizes with difficulty, and is readily soluble in water. It gives precipitates with most of the common alkaloid reagents. A few drops of a dilute aqueous solution suffice to kill frogs in fifteen minutes. Those experimented on became paralyzed, and were insensible to irritations. Symptoms of paralysis also showed themselves in rabbits after subcutaneous injection of the solution. From human and other decomposing muscle-flesh he succeeded in isolating a new poisonous substance, *eurindine*. It crystallizes in hydrochloric acid combination. From the mother liquor of nuridin a second base, *neurine*, was obtained ($C_5H_{13}NO$) which has a poisonous action on both warm and cold-blooded animals. A few milligrammes act on cats; 0.04 gramme pro kilo kills rabbits with a constant train of symptoms, among which are profuse secretions from the mucous surfaces and powerful clonic convulsions. Atropine was an efficient antidote to the poison. Three bases were obtained from decomposing fish that had been exposed to the air for five days: 1. *Entylediamine* ($C_5H_{12}NO_2$). Frogs showed a certain tolerance of this; rabbits were scarcely affected by it; but in the case of mice and guinea-pigs it produced a copious secretion from the nose, mouth, and eyes, dilatation of the pupils, and dyspnœa. 2. A substance analogous to muscarine. Injected subcutaneously into rabbits, it produced copious secretions and excretions, dilatation of the pupils, and convulsions. Atropine prevented the action of the poison. 3. *Gadinine* ($C_7H_{17}NO_2$), which appeared to be innocuous. From ten pounds of cheese that had been decomposing in water for six weeks, neuridine and trymethylamine were obtained. Neuridine and dimethylamine were also obtained from decomposing glue. The writer remarks in conclusion that the ptomaines form two classes—the poisonous and the non-poisonous—and that we are no longer justified in imputing chemical putrid infection to *none sepsi*. The formation of chemical poisons by the action of formed or unformed ferments is now proved. The character of the soil determines the synthetic power of the bacilli of decomposition. Thus, putrid muscle gives rise to the poisonous neurine, and putrid fish to the poisonous muscarine. These substances give rise to symptoms that have their analogues in certain forms of disease. The writer is now directing his attention to the ptomaines to be obtained from the human body as it undergoes different forms of decomposition.—*Medical Press and Circular*.

Pathogenic Microbes Transmitted to the Fœtus.—Dr. Koubassoff has communicated to the Académie des Sciences a paper on the relations of the fœtus to the mother in infectious diseases (*L'Union Médicale*, July 18, 1885). He injected cultivations of the bacillus of anthrax under the skin of pregnant guinea-pigs. It was found that these bacilli always pass from the mother to the fœtus. He further found that inoculation of pregnant females with a too powerful vaccine nearly always causes the death of the fœtus; that inoculation with a virulent virus after the mother had been protected by satisfactory vaccination nearly always killed the fœtus.

In other words, the fœtus cannot be protected by maternal vaccination. After the publication of the above Dr. Koubassoff continued his experiments on animals, and addressed a second communication to the same scientific body on August 21, 1885. The conclusions of this paper are as follows: (1) The bacilli of anthrax and of tuberculosis inoculated in the case of pregnant females pass into the lacteal secretion. (2) Once noted in the milk, they remain there until the end of lactation or until the death of the female. (3) The offspring nourished with milk containing these bacilli do not take these diseases, and continue to live in cases where the mother dies. (4) The passage of microbes from the mother to the fœtus depends probably on the existence in the placenta of direct communications between the vessels of the mother and those of the fœtus. It is to be hoped that these experiments may be extended to the study of erysipelas and other diseases. Long before the erysipelas coccus was described, or even thought of, observers have put to themselves the question, Is not puerperal erysipelas transmissible to the fœtus? The possibility of such transmission was suggested to Kaltenbach (*Centralblatt für Gynäk.*, No. 14, 1885) by the observation of an infant presenting at birth a well-marked desquamation of the head, neck, and back. The mother had recently had two attacks of erysipelas, the last corresponding exactly in period of evolution to the desquamation observed upon the infant. Careful examination of the patches of desquamation and of the placenta for the micro-organisms of erysipelas gave only negative results, but the length of time which had elapsed since the beginning of the affection might explain their absence. In 1879 Dr. Runge observed the following case (*Centralblatt für Gynäk.*, No. 48, 1884): When the erysipelas coccus was yet unknown, a pregnant woman developed an erysipelas on the left leg, which soon spread to the thigh. Thirteen days after the cessation of febrile movement, while desquamation was still in progress, she was delivered of a child, which presented absolutely similar desquamation of the neck, chest, and abdomen.

Simple Method for the Detection of Biliary Gravel.—Dr. Merle, of Vichy, in a communication to the Académie de Médecine, describes what he terms biliary coniasis, or biliary gravel. Pain in the hepatic region is the most important symptom. In order to detect the presence of biliary gravel, Dr. Merle recommends pouring hot water on the stools. The gravel necessarily falls to the bottom. When poured into a clean receptacle and washed, it is easily recognized.

Iodic Purpura.—At a recent meeting of the Harveian Society (*The British Medical Journal*, October 24, 1885) Mr. A. Q. Silcock related the case of a woman who was admitted into St. Mary's Hospital on account of proptosis. Although no history of syphilis could be obtained, iodide of potassium was prescribed in ten-grain doses three times a day. After the lapse of thirteen days the dose was increased to fifteen grains; seven days later a purpuric eruption appeared, most marked on the legs. Arsenic was then prescribed, in combination with the iodide, the rash disappearing after three days. The arsenic having been discontinued, the spots recurred in an aggravated form. Five minims of liquor arsenicalis were again added, and this was followed, in six or seven days, by a disappearance of the eruption and by general improvement. Arsenic was omitted; the rash again returning after ten days, accompanied with malaise and some catarrh. After this the patient lost courage, and ceased to take her medicine regularly. A few months later the iodide was again prescribed, and once more slight purpuric spots appeared after a few days, when the drug was finally omitted, the case being regarded as one of exostosis or of ossifying chondroma. In his remarks, Mr. Silcock rejected the view that the effect was due to increased diapedesis, such as is said to follow the intravenous injection of salines. Arsenic was prescribed in the hope that it might possess the same specific influence which attaches to its administration in bromide eruptions. He believed that it was frequently prescribed conjointly with iodide of potassium. In the course of the discussion which followed, Mr. Malcolm Morris alluded to the rarity of recorded cases of iodic purpura. The exceptional case published by Dr. Mackenzie deserved mention, the child having died from purpura after a single dose of two and a half grains. Even in the rash of bromide, arsenic after a time lost its beneficial effect. The paper was of great value as demonstrating that purpura was not a disease, but a symptom. Dr. Lees considered the case one of idiosyncrasy; in cases of meningitis he had administered to children large doses of iodide of potassium (three grains every three hours), for weeks and months, without any toxic effects. Children were more liable to the rash of bromide, adults to that of iodide of potassium.

The Use of Ether as an Intoxicant.—One of the members of the Diocesan Synod of Armagh, at its recent meeting, made reference, in discussing the report submitted on temperance, to a practice which exists in various parts of the north of Ireland, namely, the consumption of ether instead of whiskey. A large traffic exists in ether, more especially as it is a cheaper intoxicant than whiskey. Several cases of insanity are stated to have occurred from the excessive use of ether, some at present being in the Omagh and other lunatic asylums.—*British Medical Journal*, October 24, 1885.

The Non-contagiousness of Leprosy.—In an instructive paper on this subject by Dr. Fitch, of Honolulu, the author gives his reasons for believing that leprosy is not communicable from person to person (*Pacific Medical and Surgical Journal*, October, 1885). He sums up the evidence in favor of this view as follows: First, women conceive in numerous cases by lepers, and neither the women nor their offspring develop the disease. Second, as we have seen, drinking the saliva of a leper for years, and smoking the same pipe, fail to reproduce the disease. Third, in ten cases of inoculation, the disease is not communicated to those so inoculated in a single instance. Fourth, men married to leprous women, and *vice versâ*, are no more likely to contract the disease than are those who hold no known intercourse with lepers. Fifth, leprous parentage is no assurance that the child will become a leper. Sixth, segregation plays very little part in the decrease of the disease. Dr. Fitch then continues that, in view of these facts, he believes himself to be fully justified in saying that leprosy is a disease which cannot be communicated from a leper to any other person, by, through, or under any combination of circumstances, except heredity. That even this plays but little part in the propagation of the disease, we may know from the fact that from 1866, when Kalawao leper settlement was founded, until March 31, 1884, 2,941 lepers were consigned there, and up to October 9, 1884, only twenty-six children born in the settlement were alive, where either parent was a leper before the birth of the child. Peter Mikona is the only case that he has been able to find, so far, the parent being a leper previous to the birth of the child, who has lived to mature age and in turn become a parent. Cases where the child is born while the parent is still in the quiescent or even active stage of syphilis, and parent and child both develop leprosy afterward are common enough. Unfortunately, the fact that the disease is non-contagious does not, so far as this country is concerned, do away with the necessity for segregation; for, let a native be ever so loathsome and disgusting an object, that, to his ideas, is no reason why he should not make a public exhibition of himself, and therefore, as a measure of public decency, the community must put the leper away from others by process of law. The author believes leprosy to be a fourth stage of syphilis, or a form of scrofula subsequent to syphilis, occurring but rarely except in a virgin race, or contracted from a member of such race; and then

only in persons of a broken-down, or cachetic, nervous constitution, and rarely met with among Anglo-Saxon or Celtic races, except in blondes. On November 14, 1883, he inoculated six lepers with the virus of syphilis, by taking six ivory vaccine points, and scraping off the surface of a mucous patch on the under side of the lower lip of a native woman. The points were then allowed to dry, and in three hours after he transferred the virus to the arms of six leper girls under twelve years of age. December 14th, following, he repeated the experiment, taking the virus from a hard chancre on the penis of a Portuguese who came to his office. He saw this same man in March, 1884, three months later, in the office of a brother physician, and found he was suffering severely from secondary syphilis. The last time he used fourteen points, and inoculated fourteen lepers therefrom; but no result followed in any of the twenty experiments.

Hæmatemesis and Melæna in the New-born.—At a recent meeting of the Clinical Society of London (*British Medical Journal*, October 17, 1885), Dr. Sawtell read particulars of this case, and exhibited a preparation of the stomach showing ulceration. A small male child, born April 9, 1885, after a natural, but rather tedious, labor, suddenly vomited blood twenty-one and a half hours after birth; and, a few hours later, melæna succeeded. Up to this time milk was taken, and vitality seemed but slightly impaired. The discharge of blood continuing, much altered by admixture with meconium and mucus, the child rapidly sank, and died within twenty-four hours from the first appearance of blood. Besides general measures, sulphuric acid was given in tincture of cardamoms. Post-mortem, the stomach alone showed casual lesions, namely, small, but deep, round or oval ulcers, on the posterior wall of the cardiac end, near the lesser curve. Dr. Sawtell remarked that, after some examination of the subject, he had failed to find any record of a similar case. He quoted Billard's paper, in the *British and Foreign Medico-Chirurgical Review* for 1853, in which Rahn-Escher stated that softening of the stomach and bowel was sometimes found. An interesting case, observed by Dr. R. Neale, revealed no lesion of any kind. Dr. Edis, in the *British Medical Journal* for 1879, dealt with spurious hæmatemesis; so also Dr. Thorburn. But records of true intestinal hemorrhage in infants were so rare that Dr. West related only three as occurring in his extensive practice, and only one of these in the new-born. Finally, Rilliet's elaborate essay did not give any cases of ulceration. The author inclined to the opinion that the ulcers arose from portal obstruction and erosion by gastric juice, and concluded his paper by pointing out the difficulty of diagnosis and treatment, and the truth of Dr. West's observation, that the new-born suffered less from the effects of hemorrhage than might be expected.

The Initial Lesions of Pulmonary Tuberculosis.—The Paris correspondent of the *British Medical Journal*, October 27, 1885, writes that, at a recent meeting of the Paris Biological Society, M. Thaon, of Nice, read a paper on the initial lesions of pulmonary tuberculosis. The author has examined a considerable number of pathological specimens taken from different animals; also the lungs of animals which had died from experimental subacute pulmonary tuberculosis, or chronic tuberculosis, according to the will of the experimenter. Guinea-pigs fed morning and evening on tuberculous sputa, powdered and mixed with sterilized water, invariably died on the twelfth or fourteenth day. The lungs were a solid, compact mass of a reddish brown color, covered with yellow spots. On making a histological examination, the tissues presented small separated areas of lobular pneumonia, measuring about one-third of a millimetre; treated with picrocarmine, they were colored a deep red. They consisted of closely packed cells undergoing proliferation, free from degeneration, and were lodged in the beginnings of branching bronchial tubes. Similar lesions were observed in the pulmonary alveoli; corresponding miliary masses were also grouped round the pulmonary vessels, resulting from the infiltration from the lymphatic vessels. Bacilli were present in considerable numbers in the areas of miliary pneumonia; in those of catarrhal pneumonia they were less abundant. Bacilli could be observed migrating from the bronchi into the alveoli; there they provoked proliferation of the pulmonary epithelium, and its subsequent degeneration. Giant-cells, the zones of epithelial cells, which formerly were recognized as the characteristics of tuberculous granulations, also the various fibrous transformations special to pulmonary phthisis, were only observed in organs far advanced in tuberculosis. The bacillus, M. Thaon says, is the agent which produces all these changes. It is seen in the centre of the cellular elements in the giant-cells, and does not disappear until the caseous masses become one uniform vitreous mass.

Surface Temperature of the Abdomen in Enteritis of Children.—Dr. Moncorvo, of Rio de Janeiro, has published a very interesting account of his studies in this direction (*Journal d'Accouchements*, October 15, 1885.) He divides his little patients into two classes, the febrile and the non-febrile, according as the diarrhœa is attended or not with an elevation of the general temperature. The normal temperature of the abdominal surface in children varies, the author states, between 94.5° and 95.5° F., but it is always considerably higher in febrile diarrhœa, the average elevation being 100°. But it is especially in cases of subacute or chronic apyretic enteritis that he regards the surface thermometer as an invaluable aid to diagnosis. In a general way, he says, he has been able to satisfy himself by numerous observations that the temperature of the abdominal parietes rises a little, even before the diarrhœa begins. And, on the other hand, he often met with cases in which the diarrhœa had seemingly disappeared, but in which the surface temperature remained at 96° F., or above. But in these cases he invariably found, on interrogating the mothers, that the stools, though possessing some consistence, were not yet formed, an indication that the mucous membrane had not yet returned to a healthy condition. In apyretic enteritis the temperature of the surface varies between 96° and 99°, rising and falling with the increase or decrease of intestinal inflammation, affording thus an indication of the progress of the disease and of the benefit obtained by treatment.

Urticaria in Young Children.—At a meeting of the Clinical Society of Paris, Dr. Comby read a paper upon this subject, in which he stated that urticaria in young children was often due to dilatation of the stomach. He reported several cases in children between one and one-half and three years of age, in which there was an evident relation between the repeated attacks of urticaria, from which they suffered, and digestive troubles consequent upon dilatation of the stomach. If the skin affection be treated solely by baths and topical applications, without regard being had to the pathogenetic condition, the result will surely be a failure; but if the stomach affection be overcome by a dry régime the urticaria will disappear. In addition to a dietetic treatment it is well to conjoin washing out of the stomach and the administration of pepsine and other remedies to aid digestion.—*Journal d'Accouchements*, October 15, 1885.

Ergotine in Meningitis.—Dr. Lacroix has published a number of observations of acute meningitis cured by ergotine. He was led to use this remedy from the consideration that in this disease the vessels are first dilated and then follows the exudation. He gives the extract of ergot in a mixture of fifteen to thirty grains for children four years old, and of forty-five grains to a drachm for adults, in four ounces of water. Of this a teaspoonful is given every half hour.—*Rivista Clinica e Terapeutica*, No. 9, 1885.

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THE HISTORY OF THE TROUBLES OF THE NINTH INTERNATIONAL MEDICAL CONGRESS.

AN esteemed correspondent, who has recently returned from Europe, writes us that he met very few, if any, physicians who understood the nature of the International Congress muddle, and that he himself is still rather in the dark. We are requested to state the case again.

At the meeting of the American Medical Association, in the spring of 1884, it was decided to extend an invitation to the International Medical Congress to hold its ninth session in this country. A committee of seven was appointed, and authorized to extend this invitation in the name of the Association and of the American medical profession; also, if the invitation was accepted, to proceed with the work of preliminary organization. The invitation was given and accepted, it being perfectly understood at the time that no local, ethical, or medico-political issue should be introduced. The committee then became a Committee on Arrangements, and it proceeded, as empowered to do by the resolution creating it, to nominate the officers and formulate the rules and regulations of the Congress. Their work was very nearly completed early last spring, and its results were published in pamphlet form. There was an almost, if not completely, unanimous commendation and indorsement of this work by the medical press throughout the whole country, the officers nominated being about as nearly a representative body of men as could be easily selected.

When the American Medical Association met at New Orleans last spring a report of what had been done was made. Instead of being received favorably, this report excited a great deal of indignant criticism, combined with some strongly vituperative condemnation. The charges were, first, that the committee had given its own members too many good positions; second, that it had appointed too many gentlemen from Philadelphia and the East, and had not sufficiently recognized the claims of the West and South; third, that it had appointed as officers, and had allowed the privileges of membership, to gentlemen having so-called "New-Code" affiliations. As the New Orleans meeting was not a large one, and as its membership was made up mostly of gentlemen from the South and West, a resolution to revise the work of the committee and to enlarge its membership by the addition of a representative from each State and Territory, and from the Army, Navy, and Marine Hospital Service, was easily carried. This new committee, therefore, composed of over forty gentlemen, instead of the original seven (later eight), held its first regular meeting after adjournment of the Association in Chicago last June. It then proceeded to organize and lay down its policy. This policy embraced the elimination of all "New-Code" men from the organization and membership of the Congress, and a revision on a basis of geographical representation of the list of officers of the Congress.

This repudiation of the work, authority, and policy of the original committee, together with the election as officers of the committee of gentlemen not widely recognized as leading or representative men, caused most of the members of that committee to resign. Their resignation was quickly followed by the resignation of nearly all the leading officers of the Congress, and of many others, to the number at present of over one hundred and seventy names.

The action of the new committee, like that of the Association at its meeting in New Orleans, met with the most wide-spread and earnest disapproval from the medical press and leading medical men both of this country and England.

The grounds of criticism were and still are as follows:

First, that an organization of the Congress, which had been widely approved and was proceeding smoothly, should have been interrupted.

Second, that this interruption and rejection of the work of the first committee was really incited by a few malcontents, who took advantage of a small and unrepresentative meeting of the Association to effect their ends, and that it was not the real expression of the feeling of the profession.

Third, that the Association and the new committee have introduced a medico-political issue, viz., that of the Code, into an international scientific body, after an explicit understanding had been given that no such thing should be done.

Fourth, that by this means the Congress has been deprived of the work and help of some of America's foremost physicians and surgeons, and that the large State of New York has been almost disfranchised.

Fifth, that the character of some of the gentlemen who have been most active in promoting the present reorganized Congress is not such as to enlist the support and sympathies of the profession.

The action of the Chicago meeting of the enlarged committee was received with such a storm of indignation and was followed by so many resignations that the new managers became alarmed, and a special meeting was called at this city last September. Great affront was caused by the fact that this meeting was held in secret and its action not disclosed until several days after adjournment, and then only in the organ of the Association. At this meeting it was voted to admit as members gentlemen of New Code affiliations, but none of these were appointed officers of the Congress. Some of the vacancies caused by the numerous withdrawals were filled.

Since the September meeting resignations have continued to come in, and there are as yet no signs of reconciliation. Many of the most important offices of the Congress are still unfilled.

A few weeks ago the Executive Committee of the Congress passed a resolution declaring their indepenence of the American Medical Association, and thus entirely cutting themselves away from the authority of that body.

It was claimed at the time of the action of the American Medical Association last spring in repudiating the first committee's work that this committee was not really amenable to the Association for its authority, but that after the acceptance of the invitation by the International Medical Congress it became a creature of the latter body. The same gentlemen who denied this interpretation of parliamentary law last spring, now justify the action of the present Executive Committee. Thus the charge of inconsistency and insincerity has been added to the others.

As matters stand at present, the management of the next Congress is in the hands of an Executive Committee representing the new and enlarged committee, the best men of the country have withdrawn from all connection with the Congress, and the great majority of the numerous important vacancies in the list of officers remains unfilled. The sentiment as so far expressed abroad is unqualifiedly adverse to the policy of the present management.

As there seems to be distrust of the Congress abroad and absolute hostility to it at home, the question is asked if it would not be wiser to have no Congress at all.

Under the present policy this seems to be very advisable.

THE HOSPITAL PAY PATIENT ABUSE.

As rightly suggested by one of our correspondents in the present issue, there are two sides to the question of the pay patient abuse. One of these represents the lay management, which in the name of charity and religious zeal, gets all the glory it can from the free work of the medical staff; and the other is the desire on the part of attending physicians to give their services freely for experience and reputation. But there are gross abuses connected with both the management and the medical service. It is mainly the fault of the profession that the lay management of our hospitals dare to act as they do in assuming to be masters of the situation. It has come to pass that managers can make any rules that suit their purposes, whether they be pleasing to the medical staff or not. The members of the staff can resign if they choose, but have no other way of righting matters. If the managers decide to force the members of the staff to attend pay patients for nothing, that practically ends the matter.

Submission on one side engenders arrogance on the other. There are plenty of medical men who stand ready to step with joyous meekness into the vacant places. This is what some may call the glory of profes sional ambition. But not only the hospital appointee is swindled by being compelled to heal gratis the pay patients in his wards, but he in turn cheats the family physician of many of his just fees. This is being done in one way or another every day in some of our metropolitan hospitals. Private rooms are fitted up for such a purpose, and rich patients are charged merely for room rent and extra nurse hire. Some of these hospitals pose as purely charitable institutions, are ostensibly founded for the care of the sick poor, are constantly appealing to the public for pecuniary aid, and make a pharasaical pretence in their annual reports of the noble work they are doing. It is painful to contemplate that such hospitals are abetted in their unfair practices by members of our own profession who apparently dare not object to the rules laid down for them. The managers know this, and act accordingly. They need go but a little farther, and we shall hear of that culmination of abomination, a dollar medical shop, connected with every hospital in the city.

According to a well recognized law of political economy that which does not pay for itself should not succeed. Success vindicates the utility of every good work. The two factors always go together. If a purely charitable institution cannot prosper on its own simple merits it is better that it should fail than be bolstered up by a rotten system of fraudulent representation. Common humanity is not so dead to all the finer instincts as to allow the really needy to suffer. In a general way the demand for charity is met by prompt and proper assistance. If a free hospital cannot succeed, the fault, if any, must rest upon a heartless community, and no one can in a general way be held accountable. If it is a wrong it must right itself in its own way without the aid of missionaries or hospital managers, even if it should cheat the latter out of the opportunity of proclaiming their so-called charity on the house-tops. In too many cases the word charity is used as a trade-mark for selfish motives on the part of ambitious trustees, scheming medical men, and sectarian cranks.

A STRONG ARGUMENT IN FAVOR OF VACCINATION.

Among the many queries which the present extensive revival of vaccination has raised, is the one relating to the effect of vaccination upon one who has already had small-pox or varioloid.

We have been somewhat surprised to find that vaccination "takes" with those who have had small-pox, two or three such cases having came under notice. Upon inquiring of a physician, whose position at the Board of Health has given him a wide opportunity for observation, he assured us without hesitation that after small-pox vaccination will take always, and in the primary form. Moreover, that vaccination is a surer safeguard from small-pox than small-pox itself, for he knew of instances where unvaccinated individuals had had the disease two or three times.

This information is therefore of great importance, for most people who have had small-pox feel that they are sealed with an immunity greater than a life-time of continued vaccination could purchase for them.

DEATH IN THE HURRY.

A death of a portly man is reported, caused by running after a train. He was seventy years old and could not wait. After severe exertion he jumped upon the platform of the rear car, entered the latter just in time to drop dead from heart failure. The fact points its own moral. And yet old men with weak hearts and heavy

bodies do the thing every day on steamboat docks, railway platforms, up elevated stairways, and at almost every street corner. It is the American fashion to be in a hurry, whether the time is short or not. It would appear to be a reflection on a man's energy and determination not to overtake what is a little ahead of him. Nature sometimes retaliates in the way we mention, and the hapless victim gains all his time at once. He is quite sure then not to be left by his funeral train.

JOHN McCULLOUGH.

FROM the very beginning of the late John McCullough's illness the character of his disease was manifest. He showed unmistakable signs of general paresis. If he could have been promptly and intelligently cared for and treated at once, some stay in the progress of his malady might perhaps have been secured. As it was, there has been no mystery about his case, and nothing new that could be learned by a post-mortem examination. He died, as was predicted, and of a disease which had been perfectly recognized. John McCullough was one of the best illustrations of what often happens when an untrained brain is subjected to continual and severe emotional visions and other excesses. In such cases (to use figurative rather than technical terms) the vascular machinery that regulates the work of the higher brain-centres breaks down, the brain-cortex degenerates, softens, and is destroyed. If twenty men began life as McCullough did, and continued with habits like his, the majority would end as he did. There was no mystery or "bad luck" about it, but only the operation of inevitable law.

A FRUITFUL FIELD FOR OUR MEDICAL SOCIETIES.

THERE never was a time when physicians have so uniformly complained of hard times and light practice. They have not for this state of things the philanthropic consolation that sickness, accident, and death are any the less, because the city mortality-rate is not unusually low, and the work in hospitals and dispensaries is more extended than ever.

The fact is that the profession is feeling the inevitable results of many years of injudicious fostering of habits of medical pauperism. It is also feeling the results of the continually increasing numbers of young doctors who simply swarm throughout the city and country. Not one in ten of these earns a good living; but all get a few cases, and the sum total of their activity is felt by older men in established practice.

This increase in the number of young men affects practice not only by drawing away cases but by obliging many to put down their prices to almost insignificant sums.

It is quite time that some serious attempts at checking these evils, that every year grow worse, were inaugurated. Our medical societies would do themselves more credit, and the profession more benefit, by looking out a little for the material affairs of the members, as affected by the causes we have indicated. Instead of wasting a thousand dollars in trying to imprison a few quacks, let us have the money spent in ridding the profession of the incubus of medical paupers and impostors, in fighting useless dispensaries, badly-managed hospitals, and even colleges, if need be.

DOCTORS AND PROHIBITION.

AN active struggle is going on at Atlanta, Ga., on the subject of the legal prohibition of the sale of alcoholic liquors. A law passed by the legislature forbids the sale of alcoholic liquors of any kind for any purpose—excepting domestic wines, pure alcohol, and wines for sacramental uses. The physicians of Atlanta have embarked in the controversy as to whether this law shall be applied to that city. Dr. Joseph P. Logan, in a temperate letter to the *Atlanta Constitution*, claims that all the good which alcoholic liquors will do in any case can be done by pure alcohol properly diluted. Drs. W. S. Elkin and Henry Wile take strongly contrary grounds. Twenty-three physicians have signed and published a set of resolutions in which they "raise their voices in earnest protest against the great wrong which is attempted upon the sick, the feeble, and the infirm, whose comfort, whose welfare, and ofttimes whose very existence is dependent upon the judicious administration of some of the several forms of alcoholic stimulants commonly employed as remedial agents." They have also resolved "that the experience of medical men for ages has demonstrated unmistakably that pure alcohol is deficient in some of the most important constituents of the various kinds of spirituous liquors used as medicine, and notwithstanding the folly of legislative enactment to that effect, it can never become an efficacious substitute for them."

These Atlanta physicians are certainly as sincere as they are emphatic and eloquent in these announcements of their views. It may even be conceded that it is to their credit that they defend so vigorously the rights of their patients and the implements of their art. It must be confessed, however, that the case is put a little more strongly than medical science justifies.

The verdict of the profession at present is decidedly against the use of alcohol as a beverage, and opinion is growing in favor of a much greater limitation of its use as a medicine. It is quite untrue that "the medical experience of ages has demonstrated that pure alcohol is deficient in some of the most important constituents" which the physician desires to use in combating disease. The fact is that pure alcohol has been very little employed medicinally as a substitute for ordinary liquors, and the question whether all that can be done medicinally by the drug in any shape cannot be done by pure alcohol is, at any rate, still an open one.

Indeed, if pure alcohol were used instead of the vile concoctions that are now so extensively sold, better therapeutical results would probably be obtained.

We would not be understood as denying positively the assertions of the Atlanta doctors as to the insufficiency, medicinally, of pure alcohol. We only urge that the matter is one of those which is not yet fully tested. And perhaps our Southern confreres are right in not wishing to have Atlanta made the field of an extensive experimentation.

THE VACANCY IN THE CHAIR OF PRACTICE OF MEDICINE IN THE LONG ISLAND COLLEGE HOSPITAL.—The death of Dr. Armor creates a vacancy in the faculty which is to be filled by the best available man. All applications should be made to Dr. A. J. C. Skene, Brooklyn, N. Y.

News of the Week.

THE NEW YORK STATE BOARD OF HEALTH held its quarterly meeting in this city during the past week. The report of the Executive Committee showed that the expenses for the year ending September 30, 1885, were $25,719.55. The work of bringing up arrearages in vital statistics has been satisfactorily continued throughout the year, and 51,800 certificates of births, deaths, and marriages have been thereby recorded. The Secretary reported what means had been adopted by the Board to ward off the introduction of small-pox from Canada. The most of its efforts have been in the direction of calling into active existence the local boards of health along the northern frontier of the State, and insisting upon the immediate vaccination and revaccination of all unprotected persons at all exposed points within their jurisdiction. So successful have been the measures adopted that small-pox has been reported in only eight localities of the State outside of the cities of New York, Brooklyn, Yonkers, and Albany, which are by law exempt from the control of the State Board. The chemists of the Board reported their progress in examining food and drugs for adulteration. Their report revealed the existence of extensive departures from the standard in the case of drugs, but affecting commercial interests so large that it was deemed unwise to give publicity to the evidence until more certain results are determined and cases against offenders shall have been prepared.

MEDICAL DEPARTMENT OF THE UNIVERSITY OF WOOSTER, CLEVELAND, O.—On account of the death of Professor Geo. Hunert, A.M., M.D., the chair of Theory and Practice of Medicine is vacant in the Medical Department of Wooster University, Cleveland, O.

WAS IT ALCOHOLISMUS, OR COCAINE-POISONING?—Dr. Lilienthal, of this city, thinks that Dr. J. S. Spear's case of cocaine-poisoning simulating opium-poisoning, "was in reality one of alcohol-poisoning, and that the patient took the large doses of cocaine 'to sober up.' When we read the many cases of alcohol-poisoning recorded in our literature, as in Caspar-Lyman or in Woodman Tidy, we find the same symptoms as recorded here by our navy-surgeons; whereas I cannot find such a state as coma, pinhole-pupil, weak heart, and pulselessness recorded in any work on Coca. Vin Mariani and similar preparations of coca are rather given for toning up a weakened, exhausted nervous system."

CHARITY HOSPITAL.—As an evidence of the discipline of Charity Hospital, New York City, the Committee on Clinical Records reported for October 422 admissions, and 445 histories of patients, the excess being due chiefly to patients transferred from one ward to another. The average monthly increment of patients is 525, of which number only about twelve per centum of histories has been lost for 1885.

THE LATE DR. SAMUEL G. ARMOR, OF BROOKLYN, N. Y.—The following was adopted at the last meeting of the Detroit Academy of Medicine:

Whereas, It has been announced that Professor Samuel G. Armor, M.D., LL.D., an honorary member of this body, and for many years a resident of Detroit, died at his home in Brooklyn, N. Y., on the 27th ultimo, in the prime of his vigor and usefulness,

Resolved, That while we bow in submission to the decree of Infinite Wisdom, yet we hereby express our sense of sore bereavement in his death.

Resolved, That the untiring devotion which our friend has exhibited in his chosen life-work, the large-hearted generosity which he uniformly manifested toward his brother-physicians, and the delicate sense of honor that marked all his dealings with them, together with his thorough integrity and broad manhood, endeared him to the majority of our membership personally in life, and remain enshrined as his best legacy in death.

Resolved, That we extend our warmest sympathy to the great number who, in the death of Dr. Armor, mourn the loss of a friend and teacher.

Resolved, That a copy of these resolutions be sent to the family of Dr. Armor, to the Long Island College Faculty, to the several medical journals of Detroit, and to the New York MEDICAL RECORD and *New York Medical Journal*.

EDWARD W. JENKS,
GEO. P. ANDREWS,
J. F. NOYES,
Committee.

PASTEUR'S METHOD OF INOCULATION AGAINST RABIES, AND GUERIN'S OBJECTIONS.—The full text of Pasteur's description of his method of preventing rabies appears in the "Bulletin of the Académie de Medécine." Pasteur began by saying that, after innumerable experiments, he had discovered a prophylactic method both prompt and practical. It has proved so effective, applied to dogs, as to warrant M. Pasteur in applying it to all animals, even to man. Inoculation of a healthy rabbit, by trephining underneath the dura mater, from a spinal cord removed from a rabid dog, always produced rabies after fifteen days' incubation, on an average. Inoculation of a second rabbit from the first, of a third from the second, and so on through a series of inoculations, provokes a form of rabies presenting in each successive inoculation a shorter term of incubation. After a series of from twenty to twenty-five inoculations, the term of incubation is reduced to eight days. After a further series of from twenty to twenty-five, the term is again reduced to seven, which remains stationary up to the ninetieth. M. Pasteur, in his successive series of inoculations, has arrived at the ninetieth, and there is a very slight tendency in the term of incubation to be less than seven days.

These experiments were commenced in 1882, and they have been continued without interruption. The only virus used was obtained from a successive series of rabbits which died from rabies; consequently, a perfectly pure virus was used in these experiments, and one always identical. This, says M. Pasteur, is the great secret of the method (*le nœud pratique*). The spinal cord of these rabbits is rabid throughout. If a portion of a few centimetres in length be detached from these rabid cords, every cleanly precaution being carefully observed, and then suspended in dry air, their virulence slowly leaves them, and finally thoroughly disappears. The time required to destroy the virulence depends on the thickness of the fragment removed, and still more on the temper-

ature of the surrounding atmosphere. The lower the temperature the longer the virulence persists. If the rabid cord be removed from contact with air into carbonic acid gas, the virulence is maintained during several months, always provided no foreign microbes are allowed to attack it.

In order to render a dog refractory to rabies in a comparatively short time, M. Pasteur proceeds as follows: A portion of fresh rabid cord is suspended in a bottle containing dry air, fragments of potash being placed in it for this purpose. The period of incubation of the rabies is seven days. Every successive day the dog is inoculated by passing under the skin the quantity of sterilized broth a Pravaz's syringe can hold, a small fragment from these desiccated cords having been previously mixed with the broth. The first inoculation is made with desiccated cord that has undergone some days' preparation, in order to be certain that it has entirely lost its virulence. The next inoculation is made with a fresher preparation, and so on until a virulent portion is used. Two days must be allowed to elapse before a fresh inoculation is made. The last inoculation is made from a portion of cord which has been dried one or two days previously. The dog thus treated is rendered exempt from rabies. Inoculation under the skin, or on the cerebral surface, by trephining with the virus of rabies, fails to produce any symptom of this disease. By this method M. Pasteur rendered fifty dogs refractory to rabies without incurring one failure.

M. Pasteur had arrived at this period in his experiments, when two people who had been bitten by a mad dog arrived, on July 6th, at his laboratory, from Alsace. Theodore Vone, a wholesale grocer at Messengott, had been bitten on the arm on July 4th. Joseph Meister, aged nine, was also bitten on July 4th by the same mad dog; the child was bitten in several places on his hands, legs, and thighs; some of the wounds on the thigh were very deep, and caused him to walk with difficuly; the principal wounds were cauterized with carbolic acid at eight o'clock in the evening. The third person was the mother of Joseph Meister, who had not been bitten. M. Vone had his arm very much bruised, but he assured M. Pasteur that the bite had not passed his shirt. He was sent back to Alsace. On July 6th, sixty hours after the bite, Joseph Meister was inoculated. A Pravaz's syringeful of cord removed from a rabbit dead from rabies was injected under the skin on the right side. The rabbit died on June 21st; the marrow had been preserved in dry air from that date, a period of fifteen days. The following days fresh inoculations were made, morning and evening; each succeeding inoculation was made with cord more recently prepared; thirteen inoculations were made, covering a period of ten days.

M. Pasteur does not believe that the progressive attenuation of the rabid spinal cords enclosed in dry air is due to the action of the air. Facts that he will describe later on negatived this interpretation. He considers the cause more probably to be explained by the microbes, the origin of rabies, producing, during their cultivation, a substance endowed with a property hostile to their own development. Data already acquired concerning the *modus vivendi* of these organisms encourage the belief in this hypothesis. M. Pasteur will continue his researches on this subject, and publish the results. Since October 20th, M. Pasteur has had under treatment for rabies a young shepherd, fifteen years of age, who, on the 14th of the same month, had been badly bitten on both hands by a mad dog. The results of this further test of his prophylactic method against rabies will be made known to the Académie des Sciences.

At the close of Pasteur's communication, M. Jules Guerin rose, and after some difficulty obtained leave to put on record the following protests: 1st, That M. Pasteur made his inoculations with the virus of an artificial rabies, there being no proof that his rabbits really had the genuine disease; 2d, the patient on whom M. Pasteur had experimented was not a proper one, since his wounds had been treated with carbolic acid, and since bites of rabid dogs are not always followed by hydrophobia; 3d, M. Pasteur had only found a preventive for rabies, not a remedy for the declared disease.

CARELESS COMMENTS ON ROYALTY.—It is all very well for the laity, but it is hardly the proper thing for *The Lancet*, to speak about "the Queen's movements."

WHAT COCAINE MAY NOT DO.—The knowledge of the therapeutic virtues of cocaine has made such strides during the year, that it would seem a better method of pursuing investigation, and entering upon classification, to do it in a negative way, that is, by making a list of those diseases in which it cannot be used.

THE AMERICAN PUBLIC HEALTH ASSOCIATION will hold its Thirteenth Annual Meeting at Washington, December 8 to 11, 1885.

A SUCCESSFUL MEDICAL SOCIETY.—On October 28th the Berlin Medical Society celebrated its twenty-fifth anniversary. An opening speech was made by Virchow, who recalled the names of the distinguished members of the Society in the past, and announced that Professor Eulenberg had given the Society 10,000 marks as a fund for securing a suitable building for its meetings. Speeches were then made by Fränkel, Bergmann, and others.

DR. THAD. M. STEVENS, the first secretary of the Indiana State Board of Health, died at his home in Indianapolis, last week, of congestion of the brain. His death was quite sudden. He was fifty-four years of age. He was a nephew and namesake of Thaddeus Stevens, the great commoner. He readily took rank in the profession of medicine, and paid great attention to sanitary science. He was a member of the American Public Health Association, in which he took great interest.

THE SMALL-POX.—The Secretary of the National Board of Health reports that, during the week ending November 4th, there were 233 deaths from small-pox in Montreal and 89 in adjacent municipalities. Dr. J. T. Reeve, Secretary of the State Board of Wisconsin, under date of October 26th, states that, notwithstanding the precautions taken, a second outbreak of small-pox, brought from Montreal, has recently occurred in the State. The first outbreak was promptly suppressed, and, it is expected, by the adoption of similar vigorous measures, to prevent the spread of the disease on the present occasion.

Reports of Societies.

NEW YORK STATE MEDICAL ASSOCIATION.

Second Annual Meeting, held in New York, November 17, 18, and 19, 1885.

TUESDAY, NOVEMBER 17TH—FIRST DAY—MORNING SESSION.

THE morning session was called to order by the PRESIDENT, DR. JOHN P. GRAY. After the announcement by the Secretary of the number of attendants from each district, the annual

ADDRESS BY THE PRESIDENT

was delivered, which dealt principally with the question of the State having power to license doctors, and its effect upon medical schools. Schools of special education, as theological seminaries, law and medical schools, and institutions of technology are sustained by private contributions. Such institutions receive no privileges or grants from the State, and medical colleges do not seek pecuniary assistance from such source. No immediate legislative interference is called for in this matter, either in the interests of medical schools or medical science. The State cannot adopt any particular school or system of medicine as against another, and hence has acknowledged the legal equality of the graduates of all schools. It has been claimed that the State should create an examining body, independent of the schools, and practically take away from corporate schools of medical learning, to which the State contributes nothing pecuniarily, the power of examining their own pupils. This would be an anomaly in political economy. The English and German governments are cited as precedents to encourage State interference. Our Government, however, is not parental. and

MEDICAL COLLEGES ARE THE PROPERTY OF PRIVATE INDIVIDUALS.

Medical students likewise pay for their education. Teachers are striving to elevate the standard of medical education under great difficulties.

The annual reports of the Presidents of Branch Associations, and of the New York County Medical Association, giving the work of the year, was next presented.

THE ADDRESS ON STATE MEDICINE

was delivered by DR. ALFRED L. CARROLL, of Richmond County.

State medicine includes medical jurisprudence, medical education, and public hygiene. In the public mind, the latter assumes the greatest importance. State medicine constitutes the oldest specialty in medicine. Moses was eminent in this branch, and some of his rules might be well copied at the present time. Circumcision was taught with reference to its hygienic effects. The causes of disease should be carefully sought out. Hippocrates was eminent in this field. Galen wrote much on hygiene. The earlier teachings dwelt most upon personal hygiene. The sanitarian must be primarily

AN ACCOMPLISHED PHYSICIAN,

not a mere engineer or architect. All sanitary studies must be based on medical knowledge and experience. Medical schools almost entirely neglect the important study of hygiene, and appear to overlook the necessity of a preliminary knowledge of the science. There are thirteen hundred local boards of health in this State, and in examining for health officers, the utmost ignorance is often displayed. Only about ten per cent. of our graduates have any conception of the period of incubation of contagious diseases or the cubic feet of air necessary for each individual in a room.

A SCATHING REBUKE TO THE COLLEGES

was next administered for their laxity in admitting and graduating students.

THE PRELIMINARY KNOWLEDGE OF MANY MEDICAL STUDENTS IS ON A LEVEL WITH THAT OF A RETAIL GROCER'S CLERK.

Our metropolitan colleges are no better than country institutions in the matter of preliminary requirements. In England, hygiene is included in the four years' course. Sanitary legislation suffers at the hands of wholly ignorant demagogues and half-educated persons. From twenty to thirty per cent. of the death-rate can be reduced by sanitary measures. This pays in a financial point of view. The causes of disease must be studied more by physicians before sanitary science can be much advanced.

AFTERNOON SESSION.

The first paper was read by DR. HENRY DIDAMA, of Onondaga County, entitled

TUBERCULAR CONSUMPTION—IS IT EVER INHERITED?

The speaker said that he started with the assumption that tuberculosis was an infectious disease, due to the presence of a specific bacillus. After reviewing the literature of the subject, he read a letter from Dr. Wise, describing an epidemic of tuberculosis among cattle, in which the disease was found many times in very young calves, and even in fœtuses. He thought there could be no doubt that the disease could be transmitted in cattle, but the conditions in the human subject were different, and, notwithstanding much search and the examination of many dead infants, no case of inherited phthisis had yet been found. The author concluded that (1) tubercular consumption is not hereditary; (2) there is no peculiar inherited tendency, although (3) children of tuberculous parents, as well as those of other parents debilitated by disease, may be weak and in this way predisposed to acquire tuberculosis. And that they are more likely to become phthisical is to be explained by the fact that they are living in an atmosphere of the disease, and thus more exposed than are the children of other debilitated non-tuberculous individuals. The therapeutical indications, the author said, were to give the child of a tuberculous mother to a healthy nurse and isolate it from its parent; and, if there were any syphilitic taint, specific treatment should be commenced at once and continued for a long time, in order if possible to fortify the constitution and thus avert bacillary infection.

DR. ROCHESTER, of Erie County, related a case in which he found tubercles and a cavity in the lungs of a child three weeks old. The mother was a strong, healthy woman, but the father had died of tuberculosis before the birth of the child. The speaker believed that this was an evidence of the possibility of inherited tuberculosis.

DR. SIMEON T. CLARK, of Niagara County, then read a paper on

PSOITIS AND PERIPSOITIS,

reviewing briefly their pathology and differential diagnosis, and relating the histories of three cases of psoitis which had recently come under his observation.

DR. HYDE, of Cortland County, said that these acute abscesses were at first unconnected with the vertebral column, but that when left alone they eventually set up caries of the spine, and then at the autopsy the case is diagnosed as one of Pott's disease. His conclusion was that an early evacuation of the pus was absolutely necessary, and we should never wait for the abscess to point.

DR. MOORE, of Monroe County, believed that there was more danger of tubercular infection after opening of the abscess than before.

DR. CHARLES W. BROWN, of Chemung County, followed with a paper entitled

SHOCK, AND THE EFFECTS OF INJURIES ON THE NERVOUS SYSTEM,

in which he detailed the different forms in which shock is manifested, and mentioned the various states which

modified the intensity of this condition. He said that the surrounding circumstances exerted a greater influence upon the progress of the case than is usually supposed, and related an instance in which the patient was apparently doing well, but began to sink immediately after being told by his mother that he would not recover. Treatment should be twofold: 1, To promote reaction by application of external heat and the administration of hot brandy and coffee internally, or brandy hypodermatically; and 2, to control as far as possible the ensuing inflammation.

Dr. Frank H. Hamilton, of New York County, presented a brief paper on

RAILROAD SHOCK.

The author said that there were two forms of this affection. In the first there were early symptoms of shock, but in the other there were no early symptoms. This form, he maintained, was not true shock; there was primarily no injury to the spinal cord, but the condition was one of injury to the ligaments. This injury leads eventually to inflammation, which extends in time to the meninges and spinal marrow. It is then that the remote symptoms are observed. The injury was caused, he thought, by the throwing forward of the upper part of the body, and its sudden recoil, similar to the snapping of a whip-lash.

Dr. Edmund S. F. Arnold, of New York County, read another paper upon the

ESSENTIAL NATURE OF SHOCK,

in which he stated his belief that the phenomena of shock were due to an injury of the nervous centres presiding over nutrition, and to a partial arrest of the latter.

The discussion was participated in by Drs. Kneeland, Hyde, Moore, Kearney, Hendricks, Van de Warker, and others.

Dr. Carlos F. MacDonald, of Cayuga County, reported a case of

INSANITY FOLLOWING GUN-SHOT INJURY OF THE HEAD.

The patient presented a slight depression in the skull in the frontal region, which was the result of a gun-shot injury. It was proposed to trephine the skull, but, upon cutting through the scalp, the bone was found to be open, and through this opening a hypodermic needle was inserted, with the result of finding a cyst. Its contents were evacuated through the needle; and upon recovering from the ether the patient was found to be perfectly rational, while previously he had for weeks been wildly maniacal.

A paper by Dr. O. G. Selden, of Greene County, entitled "A Case of Intracranial Tumor, with Remarks relating to the Diagnosis of Intracranial Disease," and another, by Dr. Simeon T. Clark, of Niagara County, on "Two Peculiar Conditions of the Mammary Gland," were read by title.

Evening Session.

A DISCUSSION ON PNEUMONIA

was opened by Dr. Austin Flint, in which he propounded eight questions relative to the nature, pathology, prognosis, and treatment of acute lobar pneumonia. To the query "Is blood-letting ever indicated?" Dr. Flint answered that thirty years ago he was in sympathy with those who objected to the indiscriminate employment of this agent; now he is in sympathy with those who think it may sometimes be employed. In rare cases it may shorten or abort pneumonia by preventing the overloading of the right side of the heart. It may lessen the chances of a second or third lobe becoming involved. It must be employed early, when there is pain and dyspnœa with fulness of the systemic veins. It is of course contra-indicated in such conditions as typhoid fever, rubeola, and anæmia. Is alcohol useful in pneumonia? Whenever there are symptoms of heart-failure it should be employed. No rule can be laid down for all cases, and a careful tentative use is often indicated. An enormous tolerance of alcohol is sometimes acquired. In sickness there are never any phenomena of intoxication. In regard to antipyretic measures, quinine in large doses is often useful and often very uncertain. The doctor has not arrived at definite conclusions about antipyrine. In employing cold externally, whenever the temperature rises above 103° Fahr., a sheet wet with water at a temperature of 80° Fahr. is wrapped around the patient, who is then sprinkled every fifteen or twenty minutes with cool water. The wet sheet should be kept on until the temperature sinks to below 103° Fahr. If the patient complains of being chilly, he may be wrapped in a dry blanket. Three cases were reported in which the wet sheet acted admirably in reducing temperature. The cold bath may be dispensed with, on account of the fatigue and annoyance that it causes the patient.

Dr. Flint stated that relapses did not occur during or shortly after convalescence from pneumonia, in which respect it acts like an essential fever. Pneumonia likewise leaves no tendency to phthisis.

Question 1. Is acute lobar pneumonia a primary local inflammatory disease, or is it an essential fever, the pulmonary affection being secondary thereto and constituting its anatomical characteristic?

Dr. Didama, of Onondaga County, stated that three views have obtained in reference to pneumonia: First, preceding the attack there is an excess of fibrin in the blood, or hyperinosis. This causes an involvement of the nervous system. The lungs have an affinity for this blood and hence are affected. This view assumes what has not been proven. Second, pneumonia is an ordinary inflammation, induced by a chilling of the surface and other like exciting causes. Soldiers, sailors, and others much exposed, however, are not liable to contract the disease, which is not so prevalent in colder climates. It differs from an ordinary inflammation by the marked chill and sudden defervescence. Third, pneumonia is an essential fever with a local lesion. It is infectious and even occasionally contagious. Why are the lungs or one lobe alone affected? No more reason can be assigned that in the case of the specific lesion of typhoid fever and like diseases. This question is not finally settled, but pneumonia is probably an essential fever with a secondary pulmonary affection.

Dr. Ross, of Chemung County, stated that nothing must be accepted not borne out by fact and experience. A careful study of the pathology of pneumonia is important. Most physicians consider it a local disease, but from the following facts the doctor considers it otherwise: The onset is distinct and well marked; the disease selects by preference certain ages; when the temperature falls recovery quickly begins, although the lung is still seriously crippled; a true croupous pneumonia cannot be artificially induced; there is generally a selection of the right lower lobe, and the prostration is entirely out of proportion to the amount of lung involved.

Question 2. What facts and rational grounds, with our present knowledge, can be cited in support of the doctrine that acute lobar pneumonia depends on the presence of a specific micro-organism?

In answering this question, Dr. Janeway, of New York County, gave a history of the various researches in which pneumococci have been found in the sputa and different parts of a pneumonic lung. Mice, guinea-pigs, and rabbits inoculated with the pneumococci have contracted pneumonia. A strong case can be made out for the pneumococcus as a cause of pneumonia. The microbe acts by gaining entrance to the mouth and respiratory tract, where it grows, thus establishing the disease. In cases of inoculation there may be a mixture of septicæmia with other symptoms.

Question 3. What conditions or circumstances incident

to acute lobar pneumonia tend to render the disease fatal?

Dr. Robb, of Montgomery County, stated that pneumonia is more fatal among blacks than whites, also among females than males. A pregnant woman is in greater danger than a non-pregnant one. Pneumonia is very fatal when the upper lobe of the lung is affected. In cases of debility from alcohol the prognosis is particularly bad. Some years the disease is very fatal, from some epidemic influence. If the temperature reaches 105° F. the attack is very serious. Prune-juice expectoration and an irregular pulse and temperature, or active delirium, are bad signs. A low, muttering delirium and subsultus are always fatal.

Dr. Biggs, of New York County, stated that in six hundred uncomplicated cases the mortality was six per cent. The prognosis is bad in the following instances: 1. Patients with bad habits or in a bad condition; alcoholics especially fare badly. Over five years of age the disease is much more fatal than under that age; in old age the disease is nearly always fatal. The excitement and exertion of moving patients to a hospital may cause a fatal ending. 2. As a complication of other affections, as the exanthemata, chronic Bright's disease, valvular disease of the heart, and after surgical operations, the prognosis is bad. 3. Certain complications of the disease, as purulent infection, abscesses, albuminous urine, pleurisy with effusion, endocarditis and pericarditis render the prognosis bad. Only one per cent. of cases terminate in abscess. 4. If more than one lobe is affected the prognosis is bad; if more than two are involved the disease is nearly always fatal. 5. The intensity of action of the morbific principle affects the prognosis. Malignant epidemics seem to point to a germ theory for the disease. The immediate cause of death is heart-failure, with a collateral œdema of the lungs secondary.

Question 4. Are there known remedies or therapeutic measures capable of arresting this disease, or of exerting a curative influence by either shortening its duration or conducing in any way to a favorable termination?

Dr. Rochester, of Erie County, stated that in the earlier years of his practice a free use of the lancet and calomel gave him as good results as he has since obtained. He has used the carbonate of ammonia for many years, from the very beginning of the disease. He gives from gr. v. to x. q. 2 h. in milk, and a little Dover's powder, if necessary, to quiet the nervous system. Alcohol is to be used only in asthenic cases. The doctor does not believe in arterial sedatives like veratrum viride. For an external application, a large poultice or oil-silk jacket.

Question 5. Is blood-letting ever indicated in this disease, and, if so, what are the circumstances indicating and contra-indicating this means of treatment?

Dr. Clark, of Niagara County, has found a plurality of causes for pneumonia and a varied treatment. In plethoric cases, or where there is exhaustion of the heart with a passive congestion and dilatation of the right ventricle, blood-letting will relieve when stimulants fail. The infrequent and careful use of the lancet will often do much good.

Question 6. Is alcohol useful in the treatment of cases of acute lobar pneumonia, and, if so, what are the indications for its use, and how is its use to be regulated as regards the quantity given, etc.?

Dr. John Shrady, of New York County, stated that as a medicine alcohol has been overrated. In most cases where it is employed, from four to eight ounces a day will prove sufficient. In pneumonia of old people stimulants should be freely given. Alcohol has very little effect upon the temperature.

Dr. Ferguson, of Rensselaer County, stated that the impression through the profession of the good effects of alcohol was vague and not based on statistics. Is alcohol a food? There is no doubt that it is destroyed in the body and gives force, and is therefore food. Especially in disease it acts as a food. Alcohol is a sedative in pneumonia. It temporarily increases the strength of the heart muscle.

The meeting then adjourned.

Wednesday, November 18th—Second Day—Morning Session.

After the transaction of some general business the

DISCUSSION ON PNEUMONIA

was continued.

Question 7. To what extent is it safe and useful to employ antipyretic measures of treatment in cases of acute lobar pneumonia, inclusive of the cold bath, sponging the body, or the wet sheet?

Dr. Charles G. Stockton, of Erie County, believed that antipyretic treatment was very useful when it was not dangerous; but when, as often happens, antipyresis is ill borne, it should not be persevered in. He quoted the views of a number of American practitioners for and against the employment of external antipyretic measures. The speaker himself believed that the selection of an antipyretic should be made according to the indications of the case. He deprecated the use of external antipyretics, with the possible exception of cold sponging. He thought that antipyrine should never be given in doses larger than twenty grains, nor at intervals of less than eight or ten hours.

Question 8. Do relapses of acute lobar pneumonia ever occur during or shortly after convalescence, and does this disease involve any special liability to other diseases or sequelæ?

Dr. John G. Orton, of Broome County, said that during an extensive practice of many years past, he had never met with such relapse, and he did not believe that it could occur, admitting that pneumonia was an essential fever; and he regarded the so-called relapses of other observers as merely due to complications or the involvement of a new portion of the lung. He regarded bronchitis, pleurisy, acute nephritis, pericarditis, and heart-clot as favored in their origin by pneumonia. Meningitis he did not regard as often due to the pulmonary affection. He believed that one attack of pneumonia left behind it a predisposition to subsequent attacks, and he believed that the lung might also be so modified as to offer a nidus for the lodgement of the tubercle bacillus.

Dr. Ely Van De Warker, of Onondaga County, then read a paper on the

MEDICO-LEGAL BEARING OF PELVIC INJURIES IN WOMEN.

The speaker said that the defence, in actions concerning pelvic injuries of women, was always at a disadvantage, since it could not ascertain the real nature of the case, owing to the repugnance of the court to order an examination of the plaintiff. He related several instances of this sort. He believed that many of these plaintiffs were sincere but mistaken, their pelvic troubles dating back prior to the receipt of the alleged injury; but there was another and large class comprising women who were unmitigated frauds. The only remedy suggested was that courts insist upon evidence other than that of the plaintiff or of her physician.

Dr. A. Flint, Jr., of New York County, then delivered the address on

SOME OF THE RELATIONS OF PHYSIOLOGY TO THE PRACTICE OF MEDICINE.

Physiology, the speaker said, is the only rational basis of the practice of medicine. Although empiricism is sometimes useful, its results must be substantiated and explained by physiological knowledge. He illustrated the value of physiological researches in the diagnosis of heart disease, and showed the aid which these studies had given to the advance of physical diagnosis as a science, and to a proper appreciation of the pathology

of cardiac and other affections. The speaker then referred briefly to the medical errors, handed down from former times, which had been overthrown and cleared away by the labors of physiologists. He said that physiology teaches us that fevers should be fed in order to save the tissues, which would otherwise be sacrificed to sustain the abnormal elevation of temperature, and alcohol may be given for the same purpose. Finally, the speaker instanced the discovery of vaccination as a triumph of physiology, and referred to the study of micro-organisms, which latter he believed would eventually lead to the detection of the means both of prevention and of cure of infectious diseases.

AFTERNOON SESSION.

DR. ISAAC E. TAYLOR, of New York County, read a paper entitled

RECTO- LABIAL OR VULVAR FISTULÆ—THEIR CAUSES AND TREATMENT.

Recto-anal fistulæ are of frequent occurrence, recto-vaginal come next in frequency, while recto-labial, or vulvar, are infrequently seen. The latter subject has not received sufficient attention from the profession. The subject is akin to recto-anal fistulæ. Works on gynecology are silent in reference to the glands of Bartholin, their diseases, and the unfortunate results of them. Labial or vulvar abscesses are most usually considered as of trivial occurrence. Under the influence of various causes inflammation ensues, which may be confined simply to the excretory duct, or the gland itself. Eventually the cellular tissue which surrounds the gland becomes irritated and suppuration follows. A fistula may result from this. Vulvar-rectal fistulæ arise from abscesses in (1) the gland itself; (2) in the areolar tissue surrounding the gland; (3) the prerectal vulva. The pathognomonic symptoms are air and very thin liquid fecal matter being discharged.

DR. EDWARD M. MOORE, of Monroe County, read a paper on

RECURRING LUXATIONS,

in which he maintained that this accident was in no sense the fault of the surgeon. Torn or weakened ligaments are common factors in producing a recurrence of luxation.

DR. FREDERICK HYDE, of Cortland County, then read a paper entitled

THE DIFFERENCE IN THE SYMPTOMS OF STRANGULATED OBLIQUE INGUINAL HERNIA.

He thought that much time was often lost in seeking advice in consultation, and that it was better for each one to acquaint himself thoroughly with the symptoms so as to be able to dispense with the advice of others. The speaker formulated a number of conclusions, giving the symptoms of strangulation and the indications for herniotomy.

DR. JOHN W. S. GOULEY, of New York County, deprecated attempts at prolonged taxis, the use of ice and other topical applications, and believed that an early herniotomy was advisable. Even if there were no hernia, this operation was, as a rule, safe.

The paper was further discussed by Drs. Barrett, of New Jersey; Dudley, of New York County; and Ferguson, of Rensselaer County.

DR. JOHN S. JAMISON, of Steuben County, followed with a paper on the

MEDICINAL AND DIETETIC THERAPEUTICS OF THE COMMON FORMS OF CHRONIC INTESTINAL CATARRH.

He said that the catarrh was often kept up by retained fecal masses, and therefore laxative remedies were indicated. Starch should be avoided, as should also sweet preserves.

DR. GARRISH, of New York County, thought hygienic and dietetic treatment was more important than medicinal. Warm clothing and the use of milk were the most important prophylactic measures in children. In dysentery he gave rectal injections of subnitrate of bismuth. Oatmeal he considered harmful.

The paper was further discussed by Drs. Pomeroy, Gillis, Collins, and others.

EVENING SESSION.

DR. ISAAC PURDY, of Sullivan County, read a paper entitled

A CURSORY REVIEW OF THE EPIDEMIC AND ENDEMIC DISEASES OF SULLIVAN COUNTY DURING THE LAST THIRTY-FOUR YEARS.

The paper was an interesting sketch of the medical history of the county, in which the author described the origin and spread of the different epidemics and noted the varying characteristics of each, adverting briefly to the methods of treatment found best adapted to these different types.

The discussion which followed turned principally upon the treatment of diphtheria, and was participated in by Drs. Peters, Cronin, Pomeroy, Gerrish, and others.

DR. W. B. SABIN, of Albany County, related a case of

REMOVAL OF ENTEROLITH,

weighing between four and one-half to five ounces. The stone was removed, after crushing, through the dilated anus. It consisted of petrified fecal matter.

DR. HENRY VAN ZANDT, of Schenectady County, followed with a paper entitled

COMMERCIAL PRESCRIPTIONS,

in which he dealt very severely with the special preparations of the manufacturing chemists, not omitting a few strictures upon the physicians who lend their names to the certificates appended thereto. In the discussion, various remedies for this evil were proposed, but it was agreed that the only efficacious remedy lay in the physicians' hands—they should not use these preparations nor certify to their assumed value.

The next paper read was by DR. ISAAC DE ZOUCHE, of Fulton County, upon

PROPHYLAXIS.

The author dwelt upon the ignorance of the elementary rules of hygiene, so often displayed in rural districts, as well as in cities, and insisted that the physician's sphere lay not only in administration of drugs to cure disease, but also, perhaps even more, in the inculcation of the lessons of cleanliness.

DR. BAKER, of Oneida County, thought it was not so much the *fact* of prophylaxis that needed discussion as it was the *how*. He said that the profession seemed to be apathetic in the matter, much was said but little was done. The discussion then turned upon the Plymouth epidemic, and DR. THORNTON, of Erie County, described the origin of the disease as he studied it when a delegate from the Buffalo Board of Health.

The following papers were read by title: "The Relation of Drink to Insanity," by Dr. G. Alder Blumer, of Oneida County; "Tumors of the Jaw," by Dr. W. S. Tremaine, of Erie County; "The Treatment of Incontinence of Urine in Women, resulting from Hyperdilatation and Paralyzation of the Urethra," by Dr. Nathan Bozeman, of New York County; "Skin-flaps in Amputation and Umbilical Hemorrhage in Infants," by Dr. U. C. Lynde, of Erie County.

(To be continued.)

NEW YORK ACADEMY OF MEDICINE.

SECTION IN SURGERY.

Stated Meeting, Monday, November 9, 1885.

STEPHEN SMITH, M.D., CHAIRMAN.

IS WIRING THE FRAGMENTS ATTENDED BY SUCH SUCCESS AS TO MAKE THIS METHOD THE RULE IN THE TREATMENT OF SIMPLE FRACTURE OF THE PATELLA?

DR. JOHN A. WYETH opened the discussion on the above subject, and formulated his views in answers to the following questions:

1. Can simple fracture of the patella be treated by a method which will secure a perfectly useful limb without danger to the patient's life or limb?

2. If so, what is that method?

Dr. Wyeth said that, in the history of surgery, the first question had been answered affirmatively thousands of times. By the use of the posterior splint, obtaining ligamentous union, he had never treated a case which did not result in a useful limb; perhaps not so useful as that with the original patella, but one which permitted the patient to subsequently perform his usual work without very marked inconvenience.

Thus the second question was partially answered, but the method which he now employed and advised was Hamilton's; that is, the use of a posterior splint of some kind. This method positively incurred no risk to life or limb or comfort of the patient. The posterior splint should never be removed for at least six weeks. The dressing for the anterior aspect of the limb designed to hold the fragments in close apposition—such as the figure-of-8 application of the roller-bandage—should be inspected frequently, perhaps daily, to determine whether or not the desired approximation of the fragments was being maintained.

At the end of six weeks slight passive motion should be begun. The posterior splint should be worn for six months. Some form of splint which furnished a flexion-check must be worn for at least one year longer, making a total of eighteen months during which the posterior splint was worn. The length of time for which the patient is incapacitated for ordinary work was, by this method, six weeks.

3. Is a ligamentous union of one inch or less in length, properly obtained and protected for eighteen months, as strong as bone?

Hamilton says that it is, and Dr. Wyeth had several cases which showed that such a union was even stronger than bone. In 1877 he treated a patient for fracture of the patella, beginning two or three months after the accident occurred, and in the meantime the patient had fallen and succeeded in separating the fragments over two inches. He approximated the fragments, by the method of the posterior splint and the figure-of-8 roller over the patella, to within three-fourths of an inch, and kept the limb dressed for one year only. The result was satisfactory to the patient, and he pursued his ordinary labor without special trouble for five years, when he fell again, and produced a transverse fracture of the upper fragment, the old ligamentous union holding firmly. Dr. Hamilton relates several such cases, and they are not of infrequent occurrence.

4. Does a ligamentous union, two or three inches in length, necessarily imply a loss of function? After an unhappy experience in wiring the patella in 1882, a patient came under Dr. Wyeth's care with this fracture, and practically the case received no treatment. He was placed in bed and an ice-bag applied, and after a time a simple roller-bandage was adjusted which satisfied the patient. In that case union took place with a ligament at least *two inches* in length. The man is still under observation, and can go up-stairs—three steps at once, if necessary—and walk without limping; he can also kneel and raise himself with the limb, and is satisfied with the result of the treatment. Dr. Wyeth was well aware that ligamentous union was very apt to be followed by impaired or imperfect function, and sometimes loss of the function of extension altogether.

5. Does wiring the patella secure a better limb than can be secured by other methods of treatment? Of course, if wiring is successful, and union by bone is complete, thick, and solid throughout, it is better than anything else.

6. Is wiring a safe operation? This was the part of the subject which was most interesting to him, and in connection with it, Dr. Wyeth gave an abstract of a case he had reported in THE MEDICAL RECORD, vol. xxi., p. 596 (1882). A German girl, twenty years of age, during a storm at sea was thrown against the guard-rail, and her left patella was fractured while the leg was strongly flexed. He had at that time never heard or read of an unsuccessful result in a patella which had been wired under antiseptic precautions, and therefore performed the operation under the fullest antiseptic precautions; no untoward event occurred during its performance. The case, however, did badly, and he was obliged to amputate at the middle of the thigh to save the patient's life. At the time of the publication of his paper, he had collected nineteen cases; in five the operation was performed without antiseptic treatment, *three* dying and *two* recovering; fourteen with Listerism more or less modified. Only one out of the fourteen died. One lost the leg. In five cases bony union was supposed to have been obtained. The remaining seven recovered; one with "no bony union," and in the others motion was more or less limited.

After the study of these cases, and in the light of his own sad experience, and from a study of the subject since, Dr. Wyeth was as much convinced of the danger of the operation as he was of his own existence; and also that the benefit derived from a close coaptation of the fragments was not great enough to warrant the risk incurred by opening the joint and wiring the fragments together.

7. If it were a safe operation, would it be preferable to the method of treatment by the use of the posterior splint? Certainly, as between the two he would not hesitate to decide in favor of the latter method.

Some of the prominent objections to wiring were that the operation necessitated longer confinement in bed than the other method of treatment, as the patient must remain there six weeks or two months, with the leg in complete fixation. By Hamilton's method the patient is not confined to the bed for more than three or four days. With wiring the patella the patient is incapacitated for any kind of work for at least six months after the operation. Furthermore, he had recently seen a case in which synovitis was caused by the wires.

8. Are there any cases in which wiring is permissible? Dr. Wyeth thought that the operation should be confined to fractures in which there was a wound communicating with the joint, and in which there must be drainage.

As to other radical methods, such as treatment by means of Malgaigne's hooks, Kocher's method of throwing a wire-loop around above the fragment, one-half the loop going through the joint, and Volkman's method, in which the loop did not pass through the joint, all were objectionable, as he did not see any justification for a method which interfered with the integrity of the skin.

DR. R. F. WEIR continued the discussion, and said that he had not had any experience in the performance of this operation. His surgical inclinations had rather leaned against it. When it was first proposed, it seemed to him that the gist of the question was with reference to the safety of the operation, and Lister claimed that he had sufficient practice in antiseptic surgery to enable him to place complete reliance on its safety. Dr. Weir believed that he had carried out the details of antiseptic surgery as thoroughly as was possible, and that he had

had a fairly large experience in that field; and yet he could not feel that he had confidence in its absolute safety. He thought that all surgeons had had unfortunate experiences and disastrous results, notwithstanding the observance of all recognized and known antiseptic precautions. He had not, therefore, felt that wiring the fragments in simple fracture of the patella was a perfectly safe operation. Dr. Bull's case, quoted by Dr. Wyeth, was certainly a startling one, resulting in death after simple fracture of the patella. He had seen, in the New York Surgical Society, cases in which the operation had been performed, as well as published cases in which it had been claimed that good results had been secured; yet motion did not extend through an arc of more than twenty-five or thirty degrees, an unusual limitation after simple fracture treated by other methods. He had felt that, when treated with a well-secured posterior splint worn for a long period of time, at least three or four months, the case terminating in a separation of the fragments varying from one-fourth to one inch, a very good limb and result had been obtained.

The only argument which he could see in favor of wiring was the fact that occasionally, with a narrow bond of ligamentous union, when the limb is put to some extra motion, the other patella was fractured.

Dr. Weir would feel that, in addition to compound fracture of the patella, where we were warranted in wiring the fragments, there was one condition which possibly might call for interference, namely, those cases in which union took place with half an inch or an inch of ligament, and the bond of union stretched and became three or four inches long. Although patients got along very well with such a great length of ligamentous union, occasional cases occurred in which there was an undue liability to do themselves injury, and therefore an attempt to bring the fragments into closer apposition might be justifiable. He believed, however, that the general sentiment of the profession was concentrating more and more strongly against this operation. He had contented himself with the application of the plaster-of-Paris bandage in the treatment of fracture of the patella, and had obtained as good results with that method as with any which he had employed. He also wished that Dr. Wyeth had added to his test the question, Has aspiration for the removal of serum and blood facilitated recovery?

Dr. Post had had no experience in wiring the patella, and had been very well satisfied with results obtained by the ordinary methods of treatment. He did not consider a limb as perfect with ligamentous union an inch or more in length as it would be with bony union, but it answered well in the performance of all ordinary functions. His opinion had been that wiring the fragments should be reserved for compound fracture and for old fractures with such laxity of the ligamentous union as seriously impaired the usefulness of the limb.

Dr. M. J. Roberts had not had any experience in wiring. He reported three cases treated with the posterior splint, and all the patients recovered with useful limbs, although impaired as to functional activity.

Dr. James R. Taylor had not wired the patella, but had secured average good results by means of the posterior splint, and a device of his own for approximating the fragments.

The Chairman said that wiring the patella for fracture was a frequent operation in Bellevue Hospital. He was induced to perform it with a great deal of reluctance, but had done the operation seven times, and, so far as dangers were concerned, they had all been entirely satisfactory, no unfavorable symptoms of any kind occurring during the treatment. Three were cases of simple fracture, three were cases of old fracture with long useless ligamentous union, and the other was a case of compound fracture.

As far as he observed the three cases of simple fracture, the movements of the limb were not as free as he had seen after the same period of treatment by the posterior splint. He supposed that they would eventually have as free motion as the others. In one old case the amount of flexion was less than fifteen degrees, and the result of the operation was satisfactory.

In one case, a comparatively recent one, he found a condition which was peculiar, namely, both fragments were covered with a shell of bone, apparently a new formation from the upper surface, which broke down very much like an egg-shell. Both fragments were quite soft, except the lower surfaces, which were firm. He sawed off two thin pieces from the fractured borders, and introduced the wire, but it immediately cut through the soft bone, and to make it hold he passed the wire through the entire fragments, and was able to bring the edges together on the internal; but the middle and external portions were not quite in contact. This case did perfectly well, and subsequently the surface of the patella was so covered that there was no evidence of any separation whatever; although the wires were in the joint, the appearance was that of union by bone, and the patient could walk very well.

With regard to St. Vincent's Hospital, wiring the patella had been done there, and, so far as Dr. Smith was aware, with entirely satisfactory results.

The method of treatment which had always commended itself to him was that described by Dr. Weir, and it had given as near bony union as any except wiring. His own impression as to the danger of wiring was, that the operation was not attended by any danger at all. He had not seen any unfortunate results in his own practice, nor in Bellevue, where the operation had been performed eighteen or nineteen times, besides four or five cases in St. Vincent's.

As to how useful the limb became he did not know the general results, but in two of his cases motion was very free, but in a third case it was less free, yet was improving, and the patient was perfectly satisfied with the result of the operation. In Bellevue, passive motion had been begun as early as two weeks after the wiring; of course, practised very gently at first.

Dr. Weir asked the Chairman if he would advise the operation in cases of simple fracture of the patella.

The Chairman said that he would not urge it, as he was not yet satisfied that the operation gave better results than had been obtained by other methods. But he would not hesitate to perform it on account of its being an unsafe operation.

Dr. Poore asked if there was not an impression among surgeons that the amount of motion was less after wiring than after treatment by other methods.

The Chairman thought that the reported cases thus far did not justify such a conclusion.

Dr. Poore believed that the lack of motion with any method was due somewhat to the condition of the flexor tendons.

A running discussion then took place, which was participated in by several members, and it terminated in the adoption of a motion empowering the Chairman to appoint a committee of three to report on the subject at some future meeting of the Section.

The Section adjourned.

The *Ensayo Médico* of Caracas is responsible for the following: "*To Darwinists.*—There has just been an interesting discovery in Paraguay of a tribe of Indians furnished with tails. One day a number of workmen belonging to Tacura Tuyu were engaged in cutting grass, when their mules were attacked by Guayacuyan Indians and some of them killed. The workmen pursued them and succeeded in capturing a little boy of eight years of age. He was taken to Señor Francisco Goleochoa at Posedas, and it was then discovered that he had a tail ten inches long, and has, in consequence, excited a good deal of interest. The boy says that he has a brother who has a tail as long as his own, and that all the tribe have tails."

Correspondence.

OUR LONDON LETTER.

(From our Special Correspondent.)

THE GREAT MEETING OF THE COLLEGE OF SURGEONS—TRIUMPH OF THE MEMBERS—THE CO-OPERATION OF THE COLLEGE OF PHYSICIANS—THEIR MEETING—THE DEMAND OF MEMBERS—DISCUSSION.

LONDON, October 31, 1885.

WE have had a lively week in medical politics. Yesterday afternoon there was a magnificent meeting of members and fellows of the Royal College of Surgeons. It had been arranged that the Council would submit a report to such meeting, and the association of members was therefore active in seizing the occasion for maintaining its views. I have already informed you that the fellows have practically conceded the right of members to a share in the election of the Council. But the Council thereupon refused to recognize this principle. It is strange that men cannot see that educated members of a profession cannot always be debarred from a voice in the matters which concern them. The very title conferred, "member" of the college, is a standing rebuke to those who say members have no rights.

The meeting was held in the hall of the college. It is many years since such a privilege has been granted, and members from all parts of the country crowded the building. Mr. Sampson Gamgee came came up from Birmingham to take part in the proceedings. He is a capital speaker, a man much respected, and a thorough-going medical reformer. He took part in the meeting above mentioned many years ago, and the survivors of his then fellow reformers were delighted to again welcome him. Alas, how many of the company of the former fight were missed in this, and of those present what a change had come over them! Those then youthful looking are now old and gray, some infirm and decrepit, and some, though known to be alive, were unable to get out. Mr. Gamgee himself is much older, though he retains a good deal of his elasticity and is zealous as ever. He moved "that the Council of the Royal College of Surgeons, not having accepted the principle that members, as well as fellows, should take part in the election of the council, in the opinion of this meeting steps should be at once taken to memorialize Parliament and the Crown, so as to secure, in the interests of the public and the profession, the right to representation in the administration of affairs of the college for its 16,000 legally-qualified members."

A series of speeches followed, but it can scarcely be said that any discussion took place, as all the speakers were of one mind on the subject. No one had anything to say against the resolution, and it was adopted with much enthusiasm.

Then followed another resolution, "That in the opinion of this meeting no alteration in the constitution or in the relation of the college, or in any of its by-laws, or ordinances, shall be effected without the consent of the fellows and members convened to discuss the same." This resolution was also carried unanimously, and it was then proposed to adjourn until November 19th to receive the Council's reply, but the president ruled this *extra vires*, it is difficult to see why, as the right of adjournment is generally held to be inherent in every lawful assembly. However, a compromise was effected, for after a word or two with some of his colleagues, the president promised that another meeting should be called without unnecessary delay.

Thus the first campaign was won, and as the college wants a new charter and must get one for the contemplated conjoint action with the sister college, the members now have every opportunity of gaining representation, if they act together and agree to oppose any charter in which their rights are ignored.

A word about the report presented by the Council. It shows 16,723 members on the roll, and 1,153 fellows, and yet this little body of fellows has previously held the only privilege, that of electing the Council. During the past year 113 candidates went up for the first examination for fellowship, 64 of whom were rejected, and 56 went in for the final examination, 19 failing. For the membership there were 1,258 candidates at the primary examination, and 960 at the final. The rejections were 705 and 397 respectively. The fees paid by members constitute the main income of the college, and will certainly diminish if justice be any longer refused.

The College of Physicians, as I have already informed you, has by a large majority passed a resolution that persons examined by the two colleges should have a degree in medicine and surgery conferred upon them. Steps will be taken at once to secure for the joint colleges the necessary right, either by charter or act of Parliament. In either case the members will be able to present their grievances to the Government, and may probably obtain redress. Sir R. Bennett, and a few others opposed the movement, and thereby showed their want of breadth more decidedly than ever. Sir R. Bennett, as one of his intimates says to me, was always a "weak man," and weak men, we all know, are apt to have strong prejudices in favor of the paths of their childhood. Sir W. Jenner supported the proposed advance heartily. He is reputed to be a strong man, and I used so to regard him, but his lamentable weakness in the matter of the college fellowship has gone far to annul the notion. Unless he goes carefully through the list and sees that London lecturers are not passed by to make room for personal friends or clients, his present term of office will have done much to deprive him of the respect he has long enjoyed as an honest and liberal-minded man.

It is justice, not favoritism, on which an upright man's reputation as a ruler should rest, and Sir William Jenner is a ruler in his college, and we may well look to him when advocating advance, to repair the injustices of his predecessors and—yes, of his own previous official career.

Unless this is done the members will follow the example of the members of the sister college, and the two institutions may find themselves face to face with an enraged constituency having the ear of the Government and denouncing the proposed united action as a job intended to put money in the coffers of the colleges and the purses of some of the officials.

YELLOW FEVER AND THE EFFICACY OF QUARANTINE.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR: In the September number of the *Sanitarian*, the editor writes: "If the case of the bark John Gibson," from which a case of yellow fever was introduced into New York city, on August 18th, "is a fair example of the administration of quarantine at Delaware Breakwater, it is evident that no protection is afforded by it to the cities on the Delaware, or anywhere else, and the sooner it is abolished the better. A vessel that has been 'cleaned and fumigated,' and communicates yellow fever within a week thereafter alongside of the wharf of a populous city, in midsummer, is a dangerous specimen of sanitary service." The spirit in which the above was written is apparent by referring to the August number of the same journal, where, referring to the same case, the editor fails to recommend the abolition of the New York quarantine, through which he at first supposed the bark passed. The facts of the case are as follows: Shortly after July 16th, on which date the bark John Gibson left Cienfuegos, the mate developed yellow fever. During the voyage to Lewes, Del., five persons, of the fourteen on the vessel, had yellow fever. One case was fatal.

At Lewes the vessel went into quarantine, Acting Assistant-Surgeon W. P. Orr, of the United States Marine Hospital Service, being in charge. She was thoroughly fumigated, detained in quarantine from August 3d until August 12th, when, no further apprehension existing, she was allowed to sail for New York, where she arrived August 14th.

Acting Assistant-Surgeon Orr gave her a clean bill of health, which was referred to Health Officer Smith for personal inspection. It was publicly stated that he decided that it would be safe to honor the bill of health, but took the precaution to fumigate the vessel again.

On August 18th one of the discharged seamen of the vessel developed yellow fever, of which he died the next morning.

For eleven days this man was under observation, and yet he presented no symptoms of yellow fever. While we will not enter into any discussion of the length of time necessary for yellow fever to develop after exposure, still we cannot entirely believe it was from materies morbi still in the vessel. If so, the fumigation received in New York was as useless as that at Delaware Breakwater.

I have desired to make this public record of the case, because the Health Officer of the port of New York saw fit to make some unprofessional remarks regarding the officer at Delaware Breakwater. In consideration of the fact that five cases of yellow fever passed the New York quarantine between the last of August and October 1, 1884, it would seem that the officer in charge might understand the fallibility of quarantine.

Very respectfully,

S. T. ARMSTRONG,

Passed Ass't Surgeon U. S. Marine Hospital Service.

MEMPHIS, TENN., September 28, 1885.

PROGRESS IN MEDICAL EDUCATION—THE WOMEN TAKING THE LEAD.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR: As your columns are constantly open to notes of progress made in medical education, you will permit me to mention a detail in regard to that of the Woman's Medical College which is not generally known. This is the complete separation which has for several years been established between the courses of study in therapeutics and in materia medica. During the first year no students are permitted to study therapeutics or the action of drugs, it being theoretically absurd to suppose that this could be understood, in either health or disease, while as yet no study had been made of either physiology or pathology. But during the first year the students follow a special course on materia medica proper, under the direction of a separate professor (Professor Josephine Chevaillier). This course relates to the botanical, chemical, and pharmaceutical properties of drugs, which are not only described in systematic lectures, but handled, analyzed, dissected, and manipulated, during four months of laboratory work. The work done by the class in the last year may be estimated from the subjoined programme of laboratory work.

I think it worth while to call attention to this feature of our course, for it is an entirely original one, and entirely peculiar to our school, yet it is certainly eminently rational; and has been highly praised by so great an authority as Hoppe-Seyler, to whom Professor Chevaillier recently described it.

Practice in Chemistry.—The first four months which the first-year students spend in my laboratory are devoted to a course in qualitative analysis.

First, they acquire a knowledge of the processes by working on known bodies and mixtures of those bodies, which the student makes herself; and then analysis of unknown substances, and these are anything that may fall into my hands, such as residues from lecture-table apparatus, gall-stones, calcined bone-black, cosmetic powder (sent for analysis by Dr. Cushier), the tinted chalks, solder, one-half per cent. solution each of oxalic acid and sodium chloride (they are always puzzled by these!), mixtures of solids containing as many as ten or fifteen substances to be detected—acids and bases, etc. The laboratory work is accompanied by written examination on the groups in qualitative analysis, before the student begins the work on the group with unknown substances.

Practice in Materia Medica, 1885.—Microscopic work: Yeast, bacteria, starch grains, vegetable tissues, formic acid (from glycerine and oxalic acid), ammonium acetate, magnesium sulphate, zinc sulphate, opium suppositories, extraction of morphine from opium, acetic ether, oxalic acid, testing for alkaloids, oxide antimony, aq. camphoræ, aq. cinnamomi (distillation), aq. cinnamomi (with $MgCo_3$), arsenic iodide, ferric chloride, dialyzed iron, reduced iron, iodoform; mercuric oxide, chloride, iodide, turpeth mineral; mercurous oxide, chloride, iodide; yellow iodide mercury; red, yellow, and black wash, $Hg(Ch)_2$ (mercuric cyanide), Monset's solution, tersulphate iron, zinc delphinium, test for cod-liver oil, pil. antimonii compositæ, citrion ointment, reduced iron, fluid extract rhubarb, Fowler's soluton.

MARY PUTNAM-JACOBI, M.D.

110 WEST THIRTY-FOURTH STREET.

SPONTANEOUS ORIGIN OF TYPHOID FEVER.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR: I see by THE RECORD that the Academy of Medicine has discussed the question as to the possibility of the "spontaneous origin of typhoid fever." To avoid a tedious discussion and loading of your columns, allow me to state briefly that the question is forced upon the attention of the practitioner of the Rocky Mountain region, as well as of the adjacent plains, by the presence of what in former days, when the country was sparsely settled, was called "mountain fever." It obtained its name from the fact of the early explorers scattering in isolated parties during the summer months in the mountains along the streams in search of gold, and while so employed would be attacked with a continued fever; and as they did not have the "antecedent case" of the old settled communities—the convenient milkman, or the sewer and its priest, the plumber—to explain the origin of the fever, and as the teachings of the colleges required that there should be certain environments in order that there could be a case of typhoid fever, the disease was termed "mountain fever." Not that it necessarily originated in the mountains, because we find it all over the country, and under sanitary surroundings that could not be equalled in perfection anywhere else on the continent.

In my opinion, it is impossible for physicians to settle the question as to the spontaneous origin of some diseases as long as they remain in old settled communities, where the modes of communication are so varied.

The antecedent case of that year, or the year before, can generally be found, and the methods of communication are at hand. But let the same gentlemen come out to a new country, where the patient is not under these sanitary surroundings, as I did in 1872, and see patients, children who have not been away from home, adults who have been isolated for months in some mining cabin, or a ranchman off on his ranch "baching it," and not a neighbor nearer than ten or twenty to thirty miles, and see the disease pursue its fatal course with all the symptoms of typhoid fever, examine the eroded intestines, and the question of the spontaneous origin of typhoid fever would be settled so far as his individual opinion goes.

If typhoid fever depend upon a bacillus, then that bacillus is as thoroughly disseminated as the spore of the yeast-plant, that is always on hand when sugar and water

are mixed in the right proportions and the temperature is at the right point for its development.

In this country, dry weather seems to be a factor in the development of typhoid fever. A rainy spell will check its progress. This I have seen in Northwestern Texas: typhoid fever during dry weather, and ague during wet weather, the ague succeeding to the typhoid fever, both in the same season.

That the so-called mountain fever of the Rocky Mountain region is a typhoid fever, there can be no reasonable doubt in the minds of the early physicians still remaining in the country, and that mountain fever is of spontaneous origin, everyone who has had experience in the treatment of the disease will agree to.

I do not bring these arguments forward as new: the early writers recognized the similarity of the lesions in "mountain" and typhoid fevers. Hammond speaks of it, and Smart recognizes it (if I am not mistaken), but tries to reconcile the prevalent theories about typhoid fever and the fact of the spontaneous origin of mountain fever by claiming malarial origin, caused by water containing vegetable matter brought down from the timber line with the melting snow; but in this section the vegetable matter contained in the water of our mountain streams is a myth. I have kept the water bottled for years without decomposition or odor, and with but a very slight cloudiness in the slight sediment, and have examined the water for vegetable substances, but after evaporating the water there was next to no organic matter in the residue.

In old settled communities there is no doubt but that typhoid fever is a much severer disease than we usually find it to be in the country regions of Colorado, our larger cities in Colorado having all the conditions for the intensification of the disease, and in them the disease is severer. On page 547 of the "National Board of Health Bulletin" (1881), I state that I believe that "typhoid fever can be caused by a poison generated within the body of the patient (ptomaines) under the best circumstances of drainage, food, and water supply, healthy locality, and *absence* of contagion. The disease thus originated may be intensified, and communicated by infection or contagion to other persons, defective sanitary and hygienic conditions, of course, favoring such transmission."

Colorado is now, in the eastern portion, too well settled to prove much about the spontaneous origin of typhoid fever, even admitting the identity of mountain fever with typhoid, because the antecedent case has occurred, and those holding to that theory can, as in New York, prove anything. But in an early day, before the advent of railroads, the antecedent case was not on hand; then three, four, or more miners started out to prospect a gulch mine, and remained isolated all summer. During the fall, one of their number would be attacked with "mountain fever," or the ranchman who had not been to town for months was taken with a fatal attack of the dreaded mountain fever, even when he had not been near the mountains.

All that is now changed in this part, and it is to the older and earlier practitioners that we must turn for information.

Yours truly,

CHARLES AMBROOK, M.D.

BOULDER, COL., November, 1885.

THE PAY PATIENT ABUSE.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR: I have read with interest the editorial, "The Pay Patient Abuse," which appeared in THE MEDICAL RECORD of November 7th. It is indeed a question of the day, and one which comes very close to physicians. That patients can receive medical attendance or enjoy the benefits of surgical operations, simply for the price of board, is a monstrous injustice to those who are faithfully and diligently following the practice of their profession.

Is it not time that *lawyers* contributed their share to the public welfare? Why should there not be some public institution, where for a mere nominal fee, enough to support the establishment, say, the best lawyers in the city should be approachable for free consultations at stated intervals?

There is a screw loose somewhere. The whole system needs readjusting. The more opinions are ventilated in regard to this matter the better it will be and the brighter the hope for its adjustment.

I remain, yours truly,

A READER OF "THE RECORD."

TO THE EDITOR OF THE MEDICAL RECORD.

SIR: As often as a problem has been presented for solution, so often has it been remarked that there are two sides to a question. Apropos of this, I wish to respectfully call your attention to the opposite argument in reference to what you were pleased to call, in an editorial occupying a prominent place in the columns of a recent number of THE MEDICAL RECORD, "Pay-Patient Abuse."

The occupation of the positions of, in turn, resident physician, and attending physician, of hospitals, is a voluntary one; nay, more, these posts are sought after with fierce competition. The physicians receive ample compensation for their time and services in experience and fame. If those at present occupying such posts do not feel so, they do great injustice to the numerous aspirants waiting with longing expectancy for a vacancy.

Possibly it is unjust to the majority of those toiling in the profession that an inducement to enter hospitals is held out by the comparatively small charges, which include no physician's fees, but the hospital staff are not the ones to complain. They have bargained for experience as their honorarium, and they get it. When it is an insufficient recompense, then the position should be vacated to one of the many who will be glad of it.

If the trustees of hospitals should exact medical fees, ought not these to belong to the physician who places the patient in the institution?

I remain, yours obediently,

A HUMBLE ASPIRANT FOR A HOSPITAL APPOINTMENT.

THE TREATMENT OF MASTITIS BY REST AND COMPRESSION.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR: I have been somewhat interested in the controversy which has taken place between Dr. Milroy, of Omaha, Neb., and Dr. Harris, of Paterson, N. J., relative to "the treatment of mastitis by rest and compression." I am somewhat surprised at the claims which these gentlemen set forth, as to priority of treatment of mastitis by compression, either with adhesive straps or by the bandage; and I am more surprised to learn that Professor Mundé has taken the field as the champion of Dr. Milroy's claim. In the July number of the *Western Medical Reporter* for 1881, Dr. Oppenheimer, of Seymour, Ind., says: "I have been unable to discover the name of the originator of this method of strapping the breast in mastitis, but his name certainly deserves to be written high as a benefactor to women." I desire to call your attention to a paper upon this subject, by Dr. George E. Ranney, of Lansing, Mich., which was published in the Detroit, Mich., *Review of Medicine and Pharmacy*, in June, 1866, p. 99, and in order that there may be no mistake, I inclose a *verbatim* copy of the paper.

At a meeting of the Michigan State Medical Society, held at Bay City, June 8, 1881, in the discussion of this subject, in reply to Dr. Johnson, of Grand Rapids, who

recommended rest and light cool dressings, Dr. Ranney again explained his method of compression as follows:

"In 1866, I published, in the June number of the *Detroit Review of Medicine and Pharmacy*, an article detailing a method I had adopted for the treatment of congested and inflamed breasts, and for the prevention of the secretion of milk when, on account of a still-birth, or death of the child after delivery, or for any other reason, I wished to diminish the augmented activity of the circulation, the tendency to tumefaction, inflammation and its results, or to arrest the secretion of milk in the mammæ. This method consisted of pressure on the distended glands by means of a bandage.

"Since the publication of that article I have had frequent opportunities to test its efficiency, and in every instance where extensive exudation had not occurred, have applied the bandage to the great relief and comfort of the patient and satisfaction to myself. In fact, I feel as though I had got a perfectly sure, efficient, and simple means of absolutely controlling the distressing difficulty.

"In selecting a bandage I take a strong piece of cotton cloth sufficiently wide to reach from the axilla to below the tumefied glands, and long enough to reach around the chest and tie at the ends, which should be 'many-tailed.' The ends should be tied over the sternum, and by the many-tailed arrangement it may be tightened at short intervals, and at one sitting at the bedside, as the engorgement will rapidly diminish under the pressure thus applied. In many cases it may be necessary to place napkins or sponges between the mammæ to complete the rotundity and equitable pressure."

I send you by this mail a copy of the "Transactions of the Michigan State Medical Society" for 1881, and I beg to refer you to page 18 for the above quotation. I do not wish to in any way detract a single iota of praise which may be bestowed upon the originator of the treatment of mastitis by compression. We are all seekers after truth in the vineyard of medicine, and if Dr. Harris or Dr. Milroy, or some other person, cannot give us some facts, and proof of originality, which antedates the paper of Dr. Ranney, I can see no other way than for them to accord the originality of treatment of mastitis by compression to that gentleman.

I am aware that Dr. Ranney, since my acquaintance with him, now nearly five years, has practised this method of compression, and recommended and proclaimed it on every suitable occasion.

JULIUS A. POST, M.D.

208 SOUTH WASHINGTON AVENUE,
LANSING, MICH., October, 14, 1885.

Army and Navy News.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from November 8, 1885, to November 14, 1885.

BAILY, F. I., Colonel and Surgeon. Relieved from duty as Attending Surgeon, San Francisco, Cal., and ordered for duty as Medical Director of the Division of the Pacific and Department of California. S. O. 260, A. G. O., November 11, 1885.

NORRIS, BASIL, Lieutenant-Colonel and Surgeon. Ordered for duty as Medical Director of the Department of the Columbia. S. O. 260, A. G. O., November 11, 1885.

MCKEE, J. C., Major and Surgeon. Ordered for duty as Attending Surgeon and Examiner of Recruits, Boston, Mass. S. O. 260, A. G. O., November 11, 1885.

VOLLUM, E. P., Lieutenant-Colonel and Surgeon. Ordered for duty as Medical Director of the Department of Texas. S. O. 260, A. G. O., November 11, 1885.

SMITH, J. R., Lieutenant-Colonel and Surgeon. Ordered for duty as Attending Surgeon at New York City, N. Y. S. O. 260, A. G. O., November 11, 1885.

ALEXANDER, R. H., Lieutenant-Colonel and Surgeon. Ordered for duty as Medical Director of the Department of Arizona. S. O. 260, A. G. O., November 11, 1885.

KANE, JOHN J., Captain and Assistant Surgeon. Ordered for duty as Post Surgeon, Fort Ringgold, Tex. S. O. 141, Department of Texas, November 4, 1885.

Official List of Changes in the Medical Corps of the United States Navy for the week ending November 14, 1885.

SAYRE, J. S., Assistant Surgeon. Detached from Naval Hospital, Mare Island, and ordered to the Omaha.

DIXON, W. S., Surgeon. Detached from Coast Survey steamer Hassler upon reporting of his relief, Passed Assistant Surgeon D. O. Lewis, and wait orders.

LEWIS, D. O., Passed Assistant Surgeon. Detached from Naval Rendezvous, San Francisco, and ordered to relieve W. S. Dixon, steamer Hassler.

DUNGAN, J. S., Medical Director. Ordered to Naval Rendezvous, San Francisco, to relieve Passed Assistant Surgeon D. O. Lewis.

Medical Items.

THE GLASS-EATER A FRAUD.—Dr. T. E. Murrell, of Little Rock, Ark., writes us that the glass-eating negro whose case was reported by Dr. Burke is a humbug.

MEDICAL OFFICES in this city, with reception room privileges, command a rental of from fifty to one hundred and fifty dollars per month, according to locality.

RECENT LEGAL DECISIONS ON MEDICAL MATTERS.—The Second Comptroller of the Treasury, Judge Maynard, has charge of pension matters and occupies a semi-judicial position in regard to the proper construction of the law. Section 4718 of the United States Revised Statutes contains the following paragraph: "If any pensioner has died or shall hereafter die; or if any person entitled to a pension, having an application therefor pending, has died or shall hereafter die, his widow, or if there is no widow, the child or children of such person under the age of sixteen years shall be entitled to receive the accrued pension to the date of the death of such person. Such accrued pension shall not be considered as a part of the assets of the estate of the deceased, nor liable to be applied to the payment of the debts of said estate in any case whatever, but shall inure to the sole and exclusive benefit of the widow or children; and if no widow or child survive, no payment whatsoever of the accrued pension shall be made or allowed, except so much as may be necessary to reimburse the person who bore the expenses of the last sickness and burial of the decedent in cases where he did not leave sufficient assets to meet such expenses." The latter part of this paragraph came before Judge Maynard to decide as to the meaning of the phrase "last sickness," under the following circumstances: An old soldier named Mark Newman died in August, 1884, while his application for a pension was pending but undecided. It was granted in October, 1884, and it was decided that there was due him $2,439. He left no widow or children, and consequently, under the Statute, there was nothing payable except what was sufficient to reimburse the person who bore the expense of his last sickness and death. The pensioner had lived at the house of John Parsons during part of the time between his discharge from the Army in 1864 and his death in 1884, and the event took place at Mr. Parsons' house. The latter put in a claim to the Pension Office for $4,401 for expenses incurred during the last sickness and burial of Newman, upon the theory that the injuries received by him in the service of his country were so serious and permanent that the whole period of twenty years was to be regarded as his "last illness." The claim was once passed upon by the accounting officers of the Treasury, and allowed

in January, 1885, to the full extent of the pension, viz., $2,439. The case then came before the Second Comptroller, who decided that the phrase "last sickness" had always been limited to that which was the immediate cause of death, and could never be applied to a long period of disability, as in this case, from which no fatal results were to be immediately apprehended. For this reason the claim made by Parsons was disallowed, and instead he was granted, for expenses of board, nursing, and care of Newman, $320; for bill of physician, $92, and for funeral expenses $57, or $469 in all.—A Connecticut graveyard was recently disturbed and three old graves opened to enable an English gentleman to see if any of them contained a signet-ring, which was necessary to prove certain impressions on seals. It seemed that an important link was wanting in the settlement of an English estate, and the production of the ring would determine the succession to the property. A careful examination was made of the graves, but without finding the much-desired ring.—One of the Boston telegrams recently contained an amusing story of the examination of a witness. It appeared that a liquor trial was going on in a police court at the same time that an examination was to be held at Police Headquarters for appointment on the police force. By some misunderstanding a witness in the liquor case was admitted to the room containing the applicants for police positions. The sergeant in charge supposing that he desired to be examined physically, ordered him to remove his clothes. He appeared to be greatly surprised, and asked if that was necessary. He received an affirmative answer, and as several others in the room were doing the same thing, he followed their example. In a few minutes the physician came to examine him, and made a very thorough business of it. The face of the witness was all the time a curious study. He was evidently trying to determine what connection there was between his bodily condition and his evidence in the liquor case. All doubts were dispelled, however, when the physician remarked, casually: "So you want to be appointed on the police force, do you?" The man jumped as if he had been struck. "Mein Gott, no, I don't!" he yelled. The spectators say that he beat the record in getting inside his clothes.—A Michigan Court has recently had before it a case involving a contract made by a drug establishment not to sell certain pills below a certain price. Such a contract the judge held to be valid, on the ground that pills, unlike wheat and other articles of food, were not necessaries of life, and so not contrary to the rule which forbade, for reasons of public policy, contracts to raise the price of food artificially. The judge enunciated the startling opinion that the assertion that pills were "in any sense indispensable to the human race would be a violent presumption, not to be entertained judicially, and only to be established by evidence which every sensible man knows has no existence." The learned judge in thus attempting to annihilate a whole trade forgets that pills are indispensable to the druggist and to the patent-medicine manufacturer, if to nobody else. This extensive class of people are most positively of the opinion that the safety of the world depends upon the unhampered manufacture and sale of pills.

Concerning Points in Bacteriology.—Dr. Alfred C. Haven, of Lake Forest, Ill., writes: "I have read with pleasure the 'Lecture on Bacteriology' of Dr. Loomis, published in The Record of October 24th. While I would not presume to criticise so distinguished a savant, I cannot but notice a few statements which seem to be contradicted by other authorities, and would appeal to The Record as a referee. Is it definitely settled that bacteria belong to the *fungi*? does not Cohn, whose classification Dr. Loomis accepts, regard them as belonging to the *algæ* (vide Sternberg's 'Bacteria,' page 21)? Did not Nägeli first classify them as schizomycetes, not Cohn (Sternberg, 'Bacteria,' page 22; Klein, 'Micro-organisms in Disease,' page 34)? Dr. Loomis also says: 'Certain forms are found in the blood of *healthy* persons.' Dr. Sternberg writes: 'I have, therefore, come to the conclusion that bacteria do not occur in the blood nor in the tissues of the healthy living body, either of man or of the lower animals' ('Bacteria,' page 261). Another author writes: 'It is now admitted by most competent observers that in the healthy and normal state the blood and tissues contain no micro-organisms whatever, and that the assertions to the contrary are due to errors in the experiment, *i.e.*, to accidental contamination' (Klein, 'Micro-organisms in Disease,' page 176). Pasteur is credited by his son-in-law with the following: 'In 1863 he had established that the bodies of animals in full health are sealed against the introduction of the germs of microscopic organisms' ('Louis Pasteur,' by his Son-in-law, page 184). Dr. Loomis also writes: 'Pasteur, experimenting with the bacilli of anthrax, found, by exposing the microbes to a certain temperature higher than the most favorable for their development, they lost their virulence to such an extent that he could vaccinate sheep without danger.' In reading the 'Life of Pasteur' we do not find stress laid upon *temperature*. 'The *oxygen* of the air, then, appears to be the cause of modification of the virulence of the microbe' ('Life of Pasteur,' page 225). The virulence is diminished by exposure to the oxygen for a sufficient length of time. Finding difficulty in harmonizing these statements, I would simply refer them to The Medical Record."

To Err is Human.—"Indeed, madam, I know all about it; I saw just what ailed the woman as soon as I came into the room. There is a young man up street who is sick the same way, and I am attending him. Give the medicine as directed, and I will call around in the morning." Having delivered himself thus the young doctor took up his hat and departed. Not long after this, the pains having come on again with increased rigor, another messenger was hurried off for the old doctor, who was found just returning from a far-out call. The young doctor, upon coming over in the morning, expressed much pleasure at the supposed result of his treatment, and was rubbing his hands with an air of "I never make any mistake," when the nurse, turning down the bed-coverings, discovered to him the little one lying on his mother's arm, as she said: "By the way, doctor, has the man up street got through yet?" The moral is obvious: Do not be too previous in your diagnosis.

The Kleptococcus.—We learn with pleasure that Professor Meandra has succeeded in isolating the bacillus of kleptomania. It has long been thought that this disease owed its origin to an organism of a snaky, elusive nature, which rendered detection difficult, but it remained for Professor Meandra to first demonstrate its existence. The difficulty was, of course, to obtain pure cultivations. At length Professor Meandra secured a magpie of well-known thievish propensities, and removing a small portion of its brain, under the spray, he began the first of his long series of experiments. The organism can be readily grown in beet-juice (prepared by beating beets and straining) or in cabbage-infusion. It stains easily of a deep steel color. Under a power of eighty diameters this organism presents a hook-shape, thus ?, which gives it the name of Meandra's Interrogative Micrococcus; we would, however, suggest (with due deference to the professor's taste) the name of hookey-coccus, both as more euphonious, and as applicable, no matter what position the organism may assume; it also indicates its character as well as shape. Injected subcutaneously into cats the effects of the hookeycoccus were remarkable. Several of these animals, let loose in a back-yard, were seen two days after to creep surreptitiously into some of the neighboring houses and kleptomize pieces of meat, fish, etc. While we cannot quote the whole of this important article, we relate one interesting event. A quantity of beet-juice, in which a cultivation was far advanced, was spilled on the floor of the

laboratory. Three days after the professor missed his pocket-book, watch, and other articles of value; it was also noticed that several houses in the place had been visited and valuables taken. Mr. Lestees, the professor's assistant, a man of the highest respectability, was also missing. Professor Meandra thinks he must have inhaled some of the dry dust from the spilled cultivation. There was much excitement when the affair leaked out, and, as there are two banks in the town, the people petitioned the mayor to prevent all communication between the professor and the cashiers. There is no doubt that an attenuated cultivation can be obtained, in which case the criminals confined in the prison at Moros will be vaccinated. We agree with this great investigator when he says, "the bacillus opens a wide field for thought—an almost unfathomable vista." "Many generations must pass," he continues, "before the last microbe is stained and mounted, drawn and photographed, and stamped with the name of its discoverer." "The next two hundred years will be known in history as the Microbian Age."—*The Birmingham Medical Review.*

THE MEGALOSCOPE.—Baron Larrey recently presented, in the name of Dr. Boisseau de Rocher, to the French Academy of Sciences, a new apparatus under the above title, for exploration of the bladder, rectum, œsophagus, and stomach. The name is derived from the Greek words, μεγας, great; εικων, image; σκοπέω, to see. The mechanical part is composed of a sound carrying at its extremity, for bladder exploration, a lantern containing an incandescent lamp for illumination of the cavity. That for the stomach is formed by a sound in which another sound glides carrying an objective, and the movements of which are regulated by special mechanism. By means of the objective an image is obtained, and the interior of the cavity can be studied. As it exposes a diameter of twenty centimetres, the objective lens presents an image which is magnified by the megaloscopic lens.

HUMAN ELECTROTYPES.—M. Kergovatz, a chemist of Brest, has, says the *Scientific American*, proposed a new method of disposing of the human body after death, which he considers preferable in every way to either burial or cremation. His system is an antiseptic one, much simpler and less expensive than the old process of embalming, and is nothing more than a new galvanoplastic application. The body is coated with a conducting substance, such as plumbago, or is bathed with a solution of nitrate of silver, the after-decomposition of which, under the influence of sunlight, leaves a finely divided deposit of metallic silver. It is then placed in a bath of copper sulphate, and connected for electrolysis with several cells of a gravity or other battery of constant current. The result is, that the body is incased in a skin of copper, which prevents farther change or chemical action. If desired, this may again be plated with gold or silver, according to the taste or wealth of the friends of the dead. M. Kergovatz has employed the process eleven times on human subjects, and on many animals, and states that in all cases it was perfectly satisfactory. In spite, however, of his warm recommendation, the idea, our contemporary thinks, is repulsive. It seems a mockery to give permanence to the temple, when all that once made it valuable is gone.

PENIS CAPTIVUS.—Our esteemed contemporaries, all the world over, have been making merry over a case of supposed vaginismus reported some time ago by Dr. Egerton Y. Davis, in a Philadelphia journal, and some of them have not attempted to conceal their incredulity. The case was one of a coachman caught in *flagrante delicto*, whose efforts to extricate himself from his predicament, when discovered by his master, were a dismal failure. Most of the journals which noticed it remarked that it was a good story for the dog-days; but now, Dr. Liebrecht comes to the rescue of the reporter's reputation for veracity. He writes, in a recent number of the *Journal d'Accouchements*, to the effect that the case was not one of vaginismus, for that prevents the act of copulation, but rather of contraction of the levator ani muscle. And he states that several cases of this sort have been reported by Hildebrandt, Budin, and others, the present one differing from them only in the persistency of the spasm.

PREMATURE RUPTURE OF MEMBRANES.—Dr. F. L. Putt, of Middlebury, Ind., writes: "Please permit me to say to Dr. R. M. Cole, of Idah Springs, Cal., that in his case of premature rupture of membranes he does not state if any water escaped when true labor did come on. On the presentation I have quite frequently met with cases where there was dropsy (so to speak) of the membranes covering a fœtus, which passed away one, two, or three weeks before true labor came on, and when labor did come a normal quantity of fluid escaped; again, where the fœtus assumes a malposition, with feet or knees to appear, the membranes are ruptured in a valve shape and all the water escaped with no expulsion pain. In such cases prudence dictates patience, and the wise and frugal practitioner sits by and consoles the expectant mother to give herself no worry, as such accidents are more of a relief than a source of anxiety."

THE COMPOUND-OXYGEN HUMBUG.—Oxygen has a very narrow range of therapeutical utility, however applied. It is somewhat curious that a special oxygen or compound-oxygen treatment has been able to gain so much support and extract so much money from a credulous public. Regarding this matter, Dr. Wm. B. Clarke, of Indianapolis, Ind., sends us an account of the way in which he was deceived by a person of whom he had bought an "oxygen-plant." The person in question claimed that the formulæ were the same as those used by the quacks Starkey and Palan. The following are the formulæ, *verbatim*: "Comp. Oxygen Treatment: ℞. Citrate ammonia, 25 parts; carbonate ferri, 1 part; mix, put in retort, apply gentle heat till whole compound comes to a boiling heat, then add heat gradually, and conduct oxygen to the tank. Home Treatment of Oxygen: ℞. Nitrate ammonia, 1 ounce; chlorate potassa, 1 drachm; alcohol, 2 ounces; aqua distilled, 14 ounces; mix; one teaspoonful to inhaler full of hot water; inhale two or three times a day." By the first formula, says Dr. Clarke, nothing is produced but laughing-gas, and this is the real compound oxygen. The carbonate of iron is of no chemical import. By the second formula nitric oxygen or nitrous oxide is evolved. The exhilarating effects of nitrous oxide, and its stimulating effect in the treatment of certain nervous conditions, may account for some successes.

A HOSPITAL IN THE MORGUE.—A Vienna journal relates that the authorities of a certain village wished to have a small-pox hospital, and being unable to find a suitable location, hit upon the morgue as being well adapted for their purpose. Accordingly they moved in a number of beds, and congratulated themselves on having secured a pest-house at small expense. They had no corpse and no patient at the time, but felt that they were ready for either, whichever might present himself first. But unfortunately the Austrian health officers heard of the new combination arrangement and vetoed the project, much to the disgust of the thrifty villagers.

HÆMOSTATIC PILLS.—The following formula is recommended by M. Huchard: Powdered digitalis and extract of hyoscyamus, of each three grains; ergotine and sulphate of quinine, of each thirty grains; make into twenty pills. From five to ten pills may be taken during the twenty-four hours in metrorrhagia, epistaxis, hæmoptysis, and other hemorrhages.

GLYCERINE AS A TÆNICIDE.—Maccallum, says that glycerine is an excellent anthelmintic. He gives it in doses of one ounce and follows it with a mild purgative. He was led to employ it from observing that tape-worms were killed by immersion in it.

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PATHFINDING IN MEDICINE.[1]

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IN assuming the position which I occupy on this occasion, I comply with the request of our President, who invited me to take it in place of our esteemed and distinguished colleague, Professor Janeway, to whom it had been assigned, but who has been prevented by severe illness from fulfilling the office. On behalf of the Academy, and also in expression of my own warm feeling, I beg to utter the most sincere congratulations to him and to ourselves that his health and activity have been restored, and that we may still admire and draw upon his shining abilities and his stores of knowledge, his untiring industry and his willing helpfulness.

During the year past, it has been permitted me to see many medical men and medical institutions in various parts of Europe. One gets a new impulse from such an opportunity, and one may also be lifted to a wider horizon in the field of medicine. The privilege of attending the great International Congress at Copenhagen, and also the smaller but no less interesting annual Ophthalmological Congress at Heidelberg, could scarcely fail to ennoble one's view of the science and practice of medicine. The impression which, to me, has come uppermost, is that the line of advance must hereafter be through acute, exacting, and deep research. How little did the centuries contribute to correct knowledge of disease so long as only our unaided senses were employed! What an epoch arose when physical diagnosis began to be cultivated! How steady has been the advance, and how rich the treasure of facts, since means of physical study and examination have become more complete and numerous! We supplement the eye by the microscope, the ophthalmoscope, the laryngoscope, and the spectroscope; we augment the hearing by the stethoscope; we read the pulse by the tracing of the sphygmograph; we test muscularity by the dynamometer; we take the weight on the scales; we take the temperature by the thermometer and record it on charts; and we determine the quality of nervous and muscular reactions by the galvanic current.

Physiology has for many decades been a science founded on experiment; pathology has been rapidly pressing forward in the same direction. To read the account of how certain conclusions have been arrived at in the laboratory, by ingenious devices, and by skilful manipulations, is as fascinating as a tale of adventure. A modern laboratory for medical research is equipped with apparatus and means of experiment to a degree which creates something akin to the feeling of awe inspired by a great astronomical observatory. Chemistry, mathematics, physics, applied optics, the deft hand, the keen eye, the quick ear, the delicate touch, all are taxed to solve these subtle problems. In such a place the ordinary medical practitioner may think that he sees nothing which has any special importance to him or to his daily calling.

What relation exists between laboratory experiments and the routine of measles and childbed and pneumonia, *et id genus omne*, is perhaps unintelligible to some solid practitioners; but many a shrewd physician will admit that he is sometimes greatly puzzled by the cases which he meets, and he would like to better understand the true nature of the morbid process whose phenomena he is watching. He has learned to rely on certain drugs and therapeutic methods, he would gladly know the true affinities of these agents, and how they accomplish their work. If you tell him that a dose of iodide of potassium produces certain results according to certain laws of molecular physics, he knows that he has heard that phrase; but to trace those laws demands the laboratory with an extensive equipment, and a man to work in it who has large attainments and commanding talent. The value of good clinical observation is not to be depreciated, it must always take high rank in practical medicine; but it cannot lead far in the path of scientific medicine. We may at this day almost say that clinical observation has wrought the consummation of its work. This may not be true in the department of therapeutics, as witness cocaine, jequirity, nitro-glycerine, convallaria, and so forth. But in knowledge of the essential nature of disease, of its causation, of its prevention, and of how medicines exert their effect, and, in some measure, by what rules they are to be chosen—for all this clinical observation must be supplemented by the laboratory. I must guard myself against being misunderstood. It must be noted that I do not speak of the instruction of students, or of young practitioners. Neither do I disparage the advance in knowledge which every good practitioner gets from long experience. Much valuable knowledge is locked up in the mental storehouses of shrewd practitioners, which dies with them. It sometimes happens that important discoveries are made several times, by different individuals, before they get into the current of common knowledge. A great clinical teacher contributes not a little to the sum of truth from his own observations. The lectures of Trousseau and of Nélaton were a delight and a treasure to their listeners. But if I were to call upon our own eminent clinicians to tell us the sources whence they draw their deepest draughts of wisdom, we should hear them tell how they have sought explanation of morbid phenomena, their sequence, their mutual dependence, and their origin, in studies which have been made by the microscope, by analysis of the blood, of the urine, and of the tissues; they have called in the subtle aid of organic chemistry, they have resorted to the breeding oven, and to cultures upon gelatin. In other words, they have been working in their private laboratories, and they pride themselves on their ability to supplement their own fine senses and perceptions by these additional methods of research.

The activity which at the present time pervades our profession in zealous pursuits of this description, displays itself in all our medical journals. Our American physicians may be justly proud of their forwardness and energy in such efforts. The wonder is, that they do so much with the meagre facilities which are at their command. I pay willing tribute to men who sacrifice ease and health to pursuits of pure science; who must snatch time from bread-getting, who give public instruction, whose is the heroism of steadfastness and unshrinking labor, that they may contribute to the advance of scientific medicine. You will acquit me of any thought of belittling the achievements and aspirations of my brethren, if I venture to bring before you the need there is among us

[1] Anniversary Address delivered before the New York Academy of Medicine, November 19, 1885.

for better and more perfect methods of pursuing scientific medical research.

The conviction of the inadequacy of simple individual efforts to carry us much farther forward in medical attainment has led to the establishment of concerted efforts in the study of disease. It is proposed to gather together multiplied observations in the same diseases, and endeavor to elicit from the mass more accurate knowledge of their features and the effect of remedies upon them. Doubtless something, perhaps much, will be gained by collective investigations; but as the sum is merely the aggregate of all its parts, it is evident that by this method we shall only gain a better quality of simple clinical knowledge. We shall learn important facts in etiology, in distribution and duration of disease, in climatic influence, etc. I repeat that I do not depreciate the indispensable need of making this clinical knowledge as perfect as possible; but can we continue to rest satisfied with it? Is it not imperative that we search deeper into the phenomena of living tissues and try to understand what really goes on within them?

The affirmative answer, which every one is ready to give, may be illustrated by reference to chemistry, which analyzes the intimate character of every known substance, and creates new combinations of them, because it is not content to know only their outward qualities, their form, color, weight, consistence, etc. Chemistry is to a great degree the study of atoms and their behavior. Physics now busies itself with the affinities and repulsions of molecules, and finds in the infinitely small an ample field for its best powers.

In medicine, the aim nas for a long time been in this direction. The great implement of search has been the microscope. And if the title of my paper may seem singular, perhaps it will be thought less grotesque if I suggest that the effort to penetrate the mysteries of the human organism is not a little like the attempts of explorers to make their way through a tropical jungle. They may hew ever so sturdily with axe and saw, but the mass of vine and twines, of bush and tree, of grass and leaf, shuts out the light, hampers their labor, and keeps them in deep ignorance of what lies beyond.

When the microscope began its work, how discouraging was the vastness and complexity of the discoveries which it brought to light! How many years has it been diligently used, and how uncertain are we still about many of its revelations! But when a happy conjunction of a man and the proper environment takes place, we may reach better results. Let me give an illustration.

Some thirty years ago Virchow began his studies and lectures upon cellular pathology. The enthusiasm which they awakened spread over the whole medical world. The wonderful attention to detail, and the broad philosophy which signalized his observations, were alike remarkable. His class-room was packed with students from every country, who thought it no hardship to struggle for a seat at eight o'clock in the morning. A man of medium height and slender figure, and with quiet face, you felt the earnestness which burned within him by the tumultuousness and complexity of his sentences, as thoughts crowded thick upon him in a struggle for utterance. With his blackboard behind him and specimens of pathology before him, and microscopes coursing upon railway tracks around the tables which filled the room, he was the embodiment of the teacher and the discoverer. Admired as a teacher, his highest honor was as a discoverer. It was my privilege to see him once more at Copenhagen, and again later, when presiding over a meeting of the Medical Society in Berlin, and to note that much of the wonted energy remains. A nobly gifted man has been placed for more than thirty years in a position where he could command all needful appliances for his scientific work, and what bounteous results have followed! If some of his theories have had to be modified, much that he has done remains—for instance, regarding embolism, thrombosis, and metastasis, we shall be always in his debt. He taught us to regard the cell as the constructive element and essential factor in both normal and abnormal processes of nutrition. The life and importance of the cell, in both health and disease, it has been his work to discover and to teach. The point of view from which he has classified tumors is founded on this basis, and remains the accepted method. The light which he cast upon the nature of inflammations has not yet been obscured, and while other phenomena appear, the multiplication of cells and nuclei, and the formation of connective-tissue in the process of inflammation, will always call to mind the labors of Virchow. The work which he did was within the pathological laboratory of the University of Berlin.

To Professor Cohnheim, and also to one of Virchow's pupils, Professor Recklinghausen, we chiefly owe our knowledge of the phenomena of diapedesis as a part of the inflammatory activity. How incredible it seems that masses of living matter can make their way through the walls of blood-vessels which do not rupture and which have no visible apertures! Professor Recklinghausen is now the director of a nobly furnished pathological institute in Strasburg, whose great museum is almost wholly his own creation.

While Virchow fixed attention upon the forms and activities of cells, their multiplication and degradation, and how they build up tissues both healthy and morbid, we have come now upon a new era in the study of their life and quality. Many observers have striven to unravel the mystery of the cell itself—to bring to light the nature of its contents. The declarations on this subject have been received with a degree of distrust; but now we seem to be approaching a clearer exposition of the matter. The work of the medical pathfinder has taught us that definite and remarkable formations and structure can be seen in cell nuclei when they undergo multiplication. Conspicuously is this set forth by Flemming in his book on "Cell Substance" (Leipsic, 1882); that he has made these discoveries is due to the use of immersion objectives aided by the Abbé illuminator and other similar devices. He speaks with much reserve about tracing organized form in the material of the cell. Although he asserts that in many cases a faint fibrillation can be discerned, he is far less positive about this than some observers. The interesting part of his book is that which describes the multiplication of the nuclei. In a few cases, he says, the division of cell and nucleus is *direct*, by which he means that no visible alteration in their interior structure can be seen while the division occurs. In leucocytes and in amœboid cells is this the fact, and in some other cells of both animals and plants; but in by far the larger number of cells, the division occurs in what he calls the *indirect* way. By this he means that during this act the nucleus elongates, and at each of its extremities appears a complex figure made of filaments, whose arrangement has a great variety of forms. Sometimes it is a mere mesh, sometimes there is a resemblance to a waving fringe of fibres, or they are coiled like a bunch of angle-worms. Innumerable varieties of arrangement appear, and with a certain symmetry of disposition, at the two extremities of the elongated nucleus; or the filaments may cluster around the expanded middle of the nucleus. The plates which he gives in illustration exhibit a wonderful variety. It is not for me to do more than to refer to this subject, I do not venture even to attempt to give a clear account of it. My purpose is served in calling your attention to the opening of another path into the unknown, and that we have come so much nearer to acquaintance with the processes which transpire in the cell itself. To this metamorphosis Flemming gives the name of karyokinesis, and to certain modifications of it he attaches the name of metakinesis. With new phenomena he has been obliged to invent a new nomenclature. He is professor of anatomy in the University of Kiel, and the most of these studies have been made within seven or eight years, in his laboratory.

To another matter with which, both literally and meta-

phorically, the air is full, I must also make allusion. The existence of micro-organisms in countless numbers is no new fact. What influence they exert over living tissues has only lately become the subject of earnest attention. So long as they were not known to have any practical bearing upon human welfare, they interested almost nobody. When, however, it was shown that putrefaction of meat is due to the agency of the bacterium termo, and the decomposition of albumen to bacillus subtilis; when anthrax in cattle and sheep was found to depend on the bacillus anthracis, and that in human beings it caused malignant pustule; when suppuration of wounds was found to be associated with the development of micrococci, and when Pasteur announced that by a process of inoculation cattle could be protected against anthrax, and Lister declared that by carbolic spray and other well-known precautions the suppuration of wounds could be prevented, all the world lent its ear and investigation at once began. To what the germ-theory has developed, it is not within the scope of my remarks to narrate. It is the wonder of the age; nothing has ever arisen in medicine which has had such far-reaching results. We stand expectant, ready not to be surprised at any new announcement of strange and potential discoveries in bacteriology. Whence did all this commotion come? Chiefly from the work-room of an acute and thoughtful man, an experimenter of unrivalled ability, who noted the cloudiness which came over his infusions of meat and studied its meaning under the microscope, and by chemical methods and processes of culture. Nothing could have been more purely scientific than the labors of Pasteur during the years between 1857 and 1863. Happily, his investigations led to results of the utmost value to mankind, and so evident was the connection between study and result, that the world rings with the praises of the man of science.

At the close of the first public dinner of the Congress at Copenhagen, the guests were strolling in the open court of the hotel. Among other dignitaries the Turkish ambassador, in full costume, was present. He sought an introduction to Pasteur, and on being presented, saluted him by kissing his hand, an act of homage which he emphasized by words expressing his profound respect. The world owes a debt to Pasteur like that which it owes to Jenner, and to the discoverers of anæsthesia. For men like Virchow it has scant praise, because it does not understand their work nor their merit. To both alike the reward of honor is due, because each has wrought to the full measure in his own way.

Because labors in bacteriology promise to be fruitful in practical results, the workers in it are innumerable. and we are accumulating a wondrous store of facts. How long is now the list of diseases in which germs make their appearance!—in pneumonia, in endocarditis, in erysipelas, in pyæmia, in tuberculosis, and so on, and so on. One of the most striking illustrations is in the gonococcus of gonorrhœa, whose presence in and around them gives to the pus cells their virulent properties, and, when transferred to the eye, work such lamentable mischief. Without their existence the inoculation of pus in the healthy eye is harmless; pus bearing the gonococci excites the most intense inflammation. Similarly suppurative action in the cornea is often caused by infection by cocci. The proof of causation may be found in the fact that the most effective cure now practised for such suppurations is to sterilize them by the actual cautery. The value of chlorine and of corrosive sublimate was known empirically long ago, but the true reason for their efficacy was not known until the germs were discovered. Now the hot platinum kills at once the organisms which other agents can only less perfectly destroy.

Rosenbach (Wiesbaden, 1884), page 63, says that he knows six distinct microbes which are capable of exciting suppuration in man. Some of them grow without oxygen, others require it. Their activity may be by the production of a poison, such as sepsin or ptomaine. or a putrefactive alkaloid, which is absorbed. The secretions of the lachrymal sac, when it is inflamed, exhibit, according to Sattler, at least three different microbes, which possess pernicious properties to a greater or less degree. Founded upon exact and laborious investigations of germs and their antidotes, is the whole practice of asepsis and antisepsis. As to its importance or its value, it is not necessary for me to speak. But long unfamiliarity with general surgery, and the vivid recollection of the sacredness which was held to belong to the large joints at the time when I was passing my pupilage in the old New York Hospital, under Buck and Watson and Cheeseman and Parker, qualified me to regard with amazement both the operation which Sir Joseph Lister did for a fracture of the patella, and the lack of special interest on the part of the spectators. Freely he laid open the joint, and with much force dragged down the comminuted upper fragment by a stout hook, and wired the pieces together. Meanwhile the carbolic spray was in active operation.

Again, in Heidelberg, I was witness to a still bolder act of surgery, which I may perhaps be allowed to partially describe. Professor Czerny excised the pyloric extremity of the stomach for cancer. The piece removed was not less than one-third of the organ. It measured twelve and one-half centimetres upon the greater curvature, and nine centimetres upon the upper or lesser curvature. The rigid attention to detail in this operation was most noteworthy. The temperature of the theatre was above 80° F.; for two hours previous to the operation the air was charged with carbolic spray, and the apparatus was kept at work during all the proceeding. The assistants and nurses removed their coats and wore long white gowns, many bared their arms to the shoulders, all washed their hands and arms vigorously with soap and brushes, and gave special heed to their nails in the scouring process. Two nurses took charge of the sponges; large porcelain trays, filled with solutions of carbolic acid, held the instruments. Alongside of the operator were two bowls of a weak carbolic solution, in which to rinse his bloody hands and the instruments, and at short intervals this water was changed. Before the cut upon the linea alba was made, the skin was shaved, soaped, scrubbed, and carbolized, and cloths wrung out of a carbolic solution laid close to the wound, and as they became soiled, fresh layers were put over them. The half-dozen spectators were not allowed to approach within ten feet of the patient, because they were not, in the surgical sense, clean. I need not refer to the steps of the operation. It was elaborate and difficult, especially in controlling the blood-vessels and in putting in the sutures to unite the pylorus to the cut end of the stomach. Two hours were consumed. It was the sixth case in which Professor Czerny had operated. He wrote to me, two months later, that the man had made a perfect recovery, and that his temperature had not risen above 100° F. No greater triumph of antiseptic surgery, it seems to me, can be adduced.

Let me briefly refer to what experimental physiology has lately done in acquainting us better with the functions of the several parts of the brain. In this field we can claim some good workers in our own country and in our own academy. But the most painstaking labor and skill, aided by suitable conveniences, have been needed to achieve what has been done. No physician counts these endeavors superfluous—we all wait for further results. I call to mind a room, not less than fifty feet long, the laboratory of the hospital for the insane, in the outskirts of Munich, where Professor Gudden, with three assistants, is carrying on his studies in brain structure, making sections in thin slices of the entire organ under fluid. He was also pushing through the press a book giving the results of his own experiments, and he showed me some of the specimens from animals which he had utilized. A well-appointed establishment and a man suited to the place were there combined. What he did a few years ago, in settling the question of the partial decussation of the

fibres of the optic nerves, will guarantee the thoroughness of his work.

If he be called one of the pathfinders in medicine, you will admit that the *iter a tertio ad quartem ventriculum* is a road not too large for comfortable travelling, and that some difficulties hang about the locality to which it leads.

Let me now call to your notice a man of great ability, who has done valuable work in medicine, but who, by ungenial influences around him, was not permitted to labor in his profession as he might have done, and whose talents have therefore been little appreciated among medical men. Dr. Thomas Young practised in London during the early part of the present century, and was a physician of Middlesex Hospital. In his youth he was precocious, and showed his scientific bent by constructing a microscope from a written description; to do it he learned the principles of optics, and the use of a lathe. At the age of fourteen, he had some proficiency in Greek, Latin, French, Italian, Hebrew, Persian, and Arabic. At nineteen he began his medical studies, and while pursuing them he presented to the Royal Society a paper entitled "Observations on Vision;" he was the next year elected to membership in the society. After taking his degree in medicine he went to Göttingen, in Germany, to continue his studies. The breadth of his aim is quaintly and truly stated in a letter to his mother in which he says, "I by no means wish to confine the cultivation of my mind to what is absolutely necessary for a trading physician." In 1797 he began practice in London. In 1801 he published in the "Philosophical Transactions" the results of further studies upon the eye, in which he anticipated what was more fully set forth fifty years later. He described the existence of astigmatism in his own eye, and proved by immersing it in water that the erroneous curve was not in the cornea but in the crystalline—at least such was his conclusion.

He also calculated the difference between the foc. in the vertical and horizontal meridians, and indicated the power of the cylindric glass which would correct it. In 1802 he was made Professor of Natural and Experimental Philosophy at the Royal Institution. Two years later, when he married, he gave up his professorship by the advice of his friends, who considered it likely to interfere with his success in his profession. The comment of Arago upon this act was, that "in England a physician must not addict himself to any kind of scientific or literary research which seems foreign to the art of healing, if he would not lose the confidence of the public." He had, however, written his great paper on the "Interference of Light;" and his after-career was brilliant with researches in physical science and literature. He it was who fully deciphered the tri-lingual inscription on the famous Rosetta stone in the British Museum, and laid the foundation of the science of Egyptian hieroglyphics.

I call this famous man to your memory, not only that one who was little honored may be somewhat better known, but chiefly to bring out the fact that to succeed in medical practice his noble powers must be warped from their natural bent, and his eager mind was driven to investigations in physics, in tables of life insurance, in literary and linguistic studies, because scientific medicine was far inferior to other branches of science, and the prevailing spirit was hostile to efforts in this direction if a physician would gain popular favor. Dr. Young never was popular as a physician, but he happily inherited from an uncle a sufficient fortune. In optics, both physical and physiological, he did achieve great things, but what might he not have done in other fields of medicine, had his environment been more auspicious.

In his time nothing was esteemed in medicine which was not practical, and very narrow was the definition of the word. In this country and in our time we make the same demand with a somewhat broader meaning to the word. We admit that the strictly scientific man is a respectable but rather unintelligible person. How a Wall Street man would stare to hear Agassiz say that "he had no time for making money."

A man lately passed away who was rector of Lincoln College at Oxford, Dr. Mark Pattison. An English reviewer says of him: "A life devoted to learning in a country given over to practice, and in a university consecrated to cram, was original to the verge of eccentricity." "He believed in knowledge as a physician believes in ozone." "His paramount love and faith in knowledge dictated and governed all his mental affinities and sympathies." "He was a true liberal, because he knew what ruin a despotic government could bring upon all independent thought and study. He was no democrat, because he was aware how democracy, in its present stage at least, from no ill-will, perhaps, but out of sheer ignorance, is apt to scorn and destroy a science of which it cannot see the use and meaning."

Like virtue, like beauty, like art, knowledge has no need of apology or of justification. Up to a certain point society will admit this. Our age is more liberal in this regard than its predecessors. The meetings of scientific bodies are reported in the newspapers, and the discovery of comets is chronicled, and Tyndall's lectures are thronged. But do we in medicine hold the purely scientific studies in sufficient esteem? Medicine is, indeed, chiefly an art, but what would the art be, were there no science? As practitioners we, to some degree, separate with the cultivation of specialties. If a new book has more of recent knowledge than a reviewer thinks is easy to take in one meal, he makes the sapient remark that it is not meant for the general practitioner, but for the specialist. Why should not every medical man demand the last results of science in the books which he reads, and who shall assume, like the physician at the table of Sancho Panza, to say that this or that dish is too heavy or too dainty for his digestion? The thing which is to-day the property of the few, will next year be common to all. What men call abstract or transcendental science, will not long remain in the higher regions of study; soon it asserts its affinities with the already known, and in some way touches the ordinary needs of life.

Let me adduce an illustration in the life of one who recently met a heroic death. Edward Henry Palmer was born in Cambridge in 1840. He was not remarkable for talent in his youth, but he showed a curiosity respecting the life and manners of Gypsies, and learned their language by mingling with them. He made a dictionary of Romany for his own convenience, and he learned it with all the vagabond slang. He could always pass as one of the fraternity, and delighted to frequent their camps. After leaving school he became a clerk with a London merchant, and while employed about the docks he picked up Italian, both in its purity and in several dialects, and also French, and bits of other languages from sailors. Chance threw him in the way of a teacher of Arabic, who took kindly to him, and he essayed to learn the language. This and the growing spirit of acquisition of knowledge, moved him to give up business and enter Cambridge University. With comparative ease he gained a fair knowledge of Greek and Latin, but his craving desire was for oriental languages. To these he devoted himself intensely, and especially by intercourse with natives. He cared far less for grammars and dictionaries than for the spoken tongue; but his appetite embraced every modern language, and his facility in them was marvellous. He had a quaint humor, and he would don the dress of a dealer in oriental wares, and with the utmost gravity imitate the bearing and gestures, the protestations and unblushing falsehoods of the most practised merchant in the Turkish bazaars. He travelled in the East, and mastered Turkish, Arabic, Persian, and Hindostanee—not as scholars know them, but as the natives speak the languages—and he knew them in their dialects and variations. He was made Professor of Sanskrit and Oriental Languages at Cambridge. Once a burglary was commit-

ted in the town, and a scrap of paper was found in the room bearing strange characters. The police brought it to him. He told them it was Yeddish, which is Polish Hebrew, and indicated that the thieves were to "crack" another house the next night. They were waylaid and caught. Such was his omnivorous appetite for languages of all kinds. Such a man might never have been known beyond a small circle, and his gifts might not have conferred any great benefit upon mankind, or upon his country, save that he was a bright ornament of its cultured classes. But England found herself at war with Arabi in Egypt, in 1882. The safety of the Suez Canal made the pacification of the desert tribes of the highest importance. Whom to send among them was a difficult question to settle. What man could go knowing their languages, able to command their confidence, possessed of courage and address and discretion? That man was Palmer. The Arabs knew him of old; he had lived among them—they called him Sheikh Abdallah. He won their friendship to England, he secured the safety of the canal. As he was leaving their country his little party were cruelly murdered by robbers bent on plunder, and, at the age of forty-two, a brilliant life was quenched. Would one be likely to think that such a scholar could ever become anything more than a mere wonder and a man apart from his fellows? Such achievements as his are in themselves a triumph, the manifestations of a noble mind, something for pride and gratulation. But when these high talents and attainments found fit scope for play in the enterprise on which he entered, knowing well its peril, we see how indispensable they were to its success, and in the crowning sacrifice of patriotism we bow in homage to the lofty genius of the scholar.

Let me come back to the sphere of medicine, and I will bring before you a man, still living, who has nobly fulfilled the task of combining the highest scientific studies with results which have been of far-reaching utility. In 1850 Professor Helmholz occupied the chair of physiology in Heidelberg. He was a mathematician of rare attainments, he had a special aptitude for physics, he was a close observer and good experimenter. Like Thomas Young, he was attracted to the problems of sight. A question had been raised why the pupil of the eye is always black, save under some exceptional conditions. To this subject he addressed himself.

He not only developed the true explanation of the mysterious fact, but he also contrived the mirror which makes it possible to see the interior of the eye, and he evolved in masterly completeness the whole theory of the ophthalmoscope. Since 1851, improvements in the mechanism of the instrument have been made, but it can scarcely be said that its mathematical theory has been improved. What a boon that has been to the world, directly and indirectly, it is impossible to compute. Pursuing his studies, Professor Helmholz attacked the perplexing question of how the focusing of the eye is effected. To discover it a way must be found to measure the curves of its several refracting surfaces, viz., of the anterior surface of the cornea and of the two surfaces of the crystalline in the living subject. These elements and the distance of these surfaces from each other, and their exact position, must be determined to the fourth decimal. Taking a hint from astronomy, he contrived an instrument which permitted the needed exactness despite the involuntary movements of the most steadfast eye. His ophthalmometer was afterward improved in certain details—his measurements were slightly modified by his pupils working under his directions; but he settled these questions. He pursued the subject of physiological optics until he made a treatise which is the most perfect work on this topic in existence. It is profound and lucid; it is condensed, but it is complete; it demands close study and a mathematical training, but it satisfies the pursuit of the reader. In the ear, and in developing the theory of sound and the mathematics of tones, Helmholz did work scarcely less brilliant. To-day he holds the chair of physics in the University of Berlin, in a laboratory of magnificent equipment. He long since left physiology for his more congenial subject. That he achieved such shining successes in physiology was made possible by his exceptional talents, coupled with his mastery of mathematics and physics. To him the world owes the great strides of the present day in dealing with diseases of the eye, because he gave us the ophthalmoscope.

With this instrument in his hands Graefe began his masterly studies in clinical ophthalmology. The world has never known so brilliant a clinician, and no physician of this century lives again in so many devoted disciples. Under the same stimulus Donders turned from the general subject of physiology to the morbid conditions of refraction and accommodation of the eye, and supplemented the labors of Helmholz by systematizing and elucidating these errors of vision. The correct and scientific employment of spectacles may almost be said to have had its real birth in the labors of Donders.

His laboratory, at Utrecht, is, as you might expect, replete with all that can contribute to his department. To touch upon the labors of those who, by the influence of these men, have enriched the world with knowledge and practical achievements, would occupy the entire evening. I may not even mention any names. I may, however, show how the work of Helmholz in measuring, by an exact yet complicated instrument, the curves of the media of the eye, has borne fruit in the production by Javal, of Paris, of an ophthalmometer which becomes an instrument of daily practical utility. It measures the radius of the cornea with the least possible trouble, and reveals with ample exactness the degree of astigmatism which it may possess. By it what is often a tedious and annoying examination is done in two minutes, and the whole is an objective investigation which does not turn upon the intelligence or visual ability of the patient.

This instrument which is before you, and which was invented some five years ago, is an outgrowth of the studies of Helmholz in 1850.

Why do I present to you facts and illustrations which are more or less familiar to you all? You cannot fail to note that they have been drawn from sources foreign to our own country. You know well how our ambitious young physicians betake themselves to European capitals, and often to obscure small cities, for the knowledge which they crave. I am far from saying or feeling that American physicians are not among the best and most skilful. In surgery especially, and I may instance gynecological surgery, we have commanded the admiration of the world. In these achievements we have excelled mainly by the exceptional talent of certain individuals. Their successes were often a tale of perseverance under crushing obstacles and hindrances, as witness the early labors of Sims. But the advance of scientific study demands proper facilities in addition to the possession of talents. Even men of only average ability can accomplish useful work when they are placed in positions which facilitate it. I do not forget that the discovery of vaccination, of anæsthetics, of the ligation of arteries, was the work of individuals who were not surrounded by elaborate apparatus. But such men as Pasteur and Koch and Helmholz can do their best only when they are placed amid fitting surroundings. Because he did not have them Thomas Young was kept below the height of achievement which he might have reached in medicine. What are the surroundings fitted to bring out the powers of men of this type? They must have leisure and encouragement to work. They must have suitable pecuniary support. They must have apparatus, equipment, and laboratories adapted to the nature of their investigations.

In medicine there are two lines of study and effort. The one deals directly with the sick person, and may be called the bedside study, or, if you please, the clinical study of disease. It is founded largely upon empirical

experience. It is intelligent and rational. It strives to connect symptoms with lesions, and with the use of remedies. It is the practice of medicine which will be wise and sagacious according to how much a physician knows, and according to his consciousness of his ignorance. The second line is that which studies the secretions and tissues by the microscope and by chemical methods; which attempts to study the processes of disease as they may be imitated in the lower animals; which patiently inspects the lifeless body, where alas! only the results, and too often not the sequence, of morbid action are to be found. It attempts to give an accurate account of how remedies produce their effect, and sometimes the laboratory, as in the case of chloral, constructs a new remedy and forecasts what its application must be. The second may, perhaps, be called the philosophical study of disease. Between these two lines there is a wide gulf. How to bring them into closer connection is the problem. My plea to-night is on behalf of the laboratory. That we may have among us the same sense of its need, and the same provision which exists in Europe. Germany has taken the lead; France, Holland, Russia, Sweden, Denmark, Switzerland, and Italy are thus equipped. They do it in virtue of their centralized forms of government and education.

In republican America the case is different. We must act through the general sentiment of the community, and it is our part to awaken in it the conviction that our need in this regard is urgent. In this city we are proud of two recent noble acts of private munificence coming to aid medical teaching, and incidentally medical investigation: we boast the Carnegie laboratory, and the great gift of Mr. Vanderbilt to the College of Physicians and Surgeons. Most timely and most helpful are these generous bestowments. It will not, I hope, be thought invidious if I say that there is a still higher reach for similar philanthropy —above mere teaching, above the training of pupils beginning their course of study, above provisions for communicating what is already known; above these is the need of providing for the teaching of the teachers, of giving scope to well-trained men, already possessed of large attainments, to push their searchings into the unknown, and for study and experiment which shall lay bare new fields of scientific wealth. One such example has already been set in this country in the Johns Hopkins University. Can we in New York not hope for something similar? Will not this Academy set before itself the high ideal of seeking to realize such an establishment? Is it not an aim within its sphere, and fully appropriate to its purposes? Ought we as a profession, and organized in a corporate capacity as the Academy of Medicine —ought we to be content with an inferior aim?

This is not the first time that this suggestion has been brought before you. Most forcibly was it presented by Dr. Barker in his late valedictory address. Without plot or conspiracy between us, my thought has run in the same direction. I have brought before you some illustrations of what the higher medical research has accomplished, and I have referred to the difficulties which beset it.

In our country we have a high degree of average knowledge, we also have men of exceptional talent, who are peers among the highest; but we are just beginning to realize that, to make the most of these men, and to procure for ourselves the benefits which they can bestow, we must give them a suitable equipment, a place to work in, means to work with, and encouragement to pursue their researches into the farthest reaches. A wealthy Californian devotes a fortune to the founding of an unrivalled astronomical observatory. Honor to the man who lays this tribute at the feet of science. Will not men of wealth see that in medicine there is an opportunity and a need for wise liberality, which will not only shed lustre upon themselves and upon our country, but which is certain to bring forth fruit to bless mankind. Here, under the influence, and why not under the auspices, of this Academy of Medicine, why may we not have a laboratory which shall emulate the activities of Berlin and Strasburg, of Kiel and Heidelberg, of Cambridge and Leipzic. It is for us to proclaim our need. We show our zeal by the multitude of isolated observers, who are struggling by individual effort to do this kind of work; but we may justly ask for large and adequate appointments to fitly organize and prosecute scientific medical research. With the abundant wealth of this country, with its self-reliant and ambitious spirit, with its determination to hold a rank inferior to none, with the readiness which has been shown to provide for general education and to encourage certain departments of science, it cannot be long ere the necessity of large endowments for pursuing scientific medical research will be appreciated by those who with intelligence have also wealth.

Great gifts are obtained with little difficulty for hospitals, retreats, and dispensaries, where the wretched and sick may take advantage of medical skill; but the time is yet to come when donors shall see that their charity fails of its full purpose until a portion of it is applied to aiding the medical man to acquire a better knowledge of disease, and how to meet it. No hospital is complete which does not have its scientific appliances and conveniences for the study of the true nature of the diseases which it treats. A larger development of these arrangements is part of the topic to which I have asked your attention, and for which we may justly appeal to the liberality of an intelligent community. Give us endowment, organization, and equipment, and the fit men to utilize them will not be wanting, who shall bring out of them precious fruit, which shall ultimately go into every home with sound knowledge and skilful healing.

QUESTIONS RELATING TO STILL-BIRTHS.[1]

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It is sometimes observed that advancing civilization is particularly hard on women. While the exact truth of this statement can only be verified by an extensive and exhaustive study of statistics, the rapid growth of gynecology, together with the increased difficulty and danger so frequently attending the delivery of children, certainly seem to point toward a tendency to physical degeneracy in women. There appears to be little doubt, likewise, that the number of still-births is somewhat on the increase, although it is very difficult to get accurate and reliable statistics to prove it. The object of this paper is to bring out a few suggestive points of interest in regard to still-births, particularly in reference to causes, statistics, and the peculiarities of the law in connection with still-births and live-births.

It is written with the idea of instituting a discussion, as individual, unwritten experience is largely valuable in forming collective knowledge on a subject of this kind. Whether the Malthusian doctrine in the abstract commends itself or not, it certainly is desirable to save all fœtal life that has begun. Not only has the unborn child legal and moral rights, but the mother is likewise better for giving birth to a healthy, living child. There is no doubt of the fact of a tremendous loss of fœtal life, and that frequently of a quality undesirable to be wasted. As a high state of civilization appears to exhaust women physically, in order to advance them mentally, it is not strange that the more cultured women, who have the means and leisure to correctly train children, are just the ones who cannot or will not have them. The poorer classes, however, crowded in tenement-houses, and unable from their unfortunate environment to bring up children in a healthy condition, either morally or physically, are inordinately prolific.

It is a point of great social interest and importance,

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although beyond the limits of this paper, to consider the immense destruction of fœtal life that is continually going on from natural and criminal abortion, as well as the loss from still-births. In a rapidly growing country like our own, continually reinforced by swarms of immigrants, this question does not assume the immediate importance that attaches to it in some of the older countries of Europe. It is said that in France the Government is becoming seriously alarmed over the decrease in native births, and has offered inducements in the shape of a prize for the seventh child. A still-birth may be defined as the delivery of a dead child in premature labor or at full term. Death may have taken place before, or in consequence of some delay or accident during delivery. Premature labor refers to that occurring after viability and before full term. The following concise definition of viability is found in Abbott's Law Dictionary: "An infant newly born is said to be viable, if the organs are in such a state of regular conformation and development as to render the infant capable of living. But if an infant, newly born, be affected with such a disease or malformation as to render a continuance of life impossible, the infant is said to be non-viable, and, according to some systems of law, is, so far as regards the transmission of right to legal representatives, as if he had never been born." Although there is direct continuity in the life of the fœtus from conception to delivery at full term, a physiological difference exists between a viable and non-viable child. In the former case, not only have the viscera a more perfect development, but the hold upon uterine life is much stronger. A majority of the cases in which the fœtus is passed earlier than full term happen before the period of viability. A miscarriage, by which is meant the expulsion of an ovum, or non-viable child, is a much more frequent accident than premature labor. According to Beck, the ancients believed that the vital principle was not infused into the fœtus until some time after conception had taken place. Thus Galen considered animation to take place on the fortieth day after conception, at the same time that he supposed the fœtus to become organized. We now know that the embryo possesses inherent vitality from the very beginning of conception, but it is not until after viability that this life can exist in any way independent of the intrauterine environment. Works on obstetrics generally state that a fœtus is viable at about the end of the seventh month, or at the completion of the twenty-eighth week of pregnancy. Thus, although a six months' fœtus may breathe feebly after birth, it will usually die in the course of a short time.

There are cases on record, however, in which infants have been born viable at an earlier period than is usually conceded by obstetrical authors. Wharton and Stillé cite a number of such cases. In one instance, a living child was born on the one hundred and seventy-ninth day and lived for four months, when it died of an epidemic disease (*Lancet*, April, 1852). In another case, Dr. Barker, of Dumfries, reported a child born on the one hundred and fifty-eighth day of gestation; it weighed one pound, and measured eleven inches. Three and a half years afterward it was still living, and weighed twenty-nine and a half pounds (*Med. Times*, September and October, 1850). The authors mention another curious instance of survival in a very premature child, narrated by Dr. Rodman, of Paisley. The child's uterine age could not have been more than five months, since, three weeks after birth, it weighed only one pound thirteen ounces, and measured between eleven and thirteen inches. It survived its birth one year and nine months (*Guy's Med. Jour.*). The question of viability is an interesting one, not only as affording a distinction between a miscarriage and a premature labor resulting in still-birth, but also as a subject on which legal distinctions may be drawn. In the case of Marsellis *vs.* Thalhimer (Paige's "Chancery Reports," vol. ii.), it is stated that children born within the first six months after conception are presumed to be incapable of living, and, therefore, cannot take and transmit property by descent unless they actually survive long enough to rebut that presumption. A glance at some statistics derived from the records of the New York City Board of Health will be of interest in the consideration of still-births. It is the desire of the Board that cases of miscarriage be reported as well as still-birth. As it is a misdemeanor to dispose of any body without a burial permit, and as a three months' old fœtus is a body, it follows that all such cases should be reported and a burial certificate given before disposal is made of the fœtus, however small. As a matter of fact, only the smallest fraction of the miscarriages that are constantly occurring are reported, and the remains of the fœtus find refuge in any place from the water-closet to an ash-barrel.

The following table contains the still-births, including such miscarriages as have been reported, and the live-births reported to the Board of Health for the fifteen years from 1870 to 1885. I am indebted to the courtesy of Dr. Nagle, Registrar of Vital Statistics, for the procuring of these figures:

	Still-births.	Live-births.		Still-births	Live-births.
1870	2,254	14,524	1879	2,191	25,573
1871	2,276	20,821	1880	2,362	27,536
1872	2,322	22,068	1881	2,462	26,130
1873	2,312	22,683	1882	2,658	27,321
1874	2,227	25,747	1883	2,697	28,972
1875	2,274	23,813	1884	2,908	30,527
1876	2,290	23,744			
1877	2,164	25,569		35,639	370,757
1878	2,192	25,729			

According to this table the proportion of still-births, including the miscarriages that have been reported, is to the live-births as 1 to 10.44. This shows an enormously high percentage of still-births. An objection may be raised to the reliability of these figures, inasmuch as the returns of live-births are unfortunately defective, owing to the carelessness of physicians and midwives. Death returns are extremely accurate, as burial permits have to be procured, but in the absence of such a necessity birth reports are often allowed to lapse. Physicians should recognize the importance of reporting each case and thus correct this source of error. Still, I doubt if the figures would be very much out of the way if they were taken to represent the total loss of fœtal life at all periods of utero-gestation, in proportion to all the live-births. The immense number of miscarriages that are concealed would more than offset the live-births not reported. The following is the month of utero-gestation in which the 35,639 cases occurred:

1	2	3	4	5	6	7	8	9	10	Not stated.
13	76	497	1,132	2,023	4,052	4,877	5,314	16,902	174	581

It is seen by glancing at this table that a large number of still-births are reported, but comparatively few miscarriages. It is not to be supposed from this that still-births are more frequent than miscarriages. The natural explanation given by the Board of Health is that in the latter cases the fœtus is so small that it can be easily destroyed and disposed of, particularly in cases of criminal abortion and illegitimate parentage. On the contrary, it is much more difficult and risky to get rid of a large and well-developed fœtus without a regular still-birth certificate and burial permit.

There is not the slightest doubt that fœticide is vastly more common in the early than in the later period of utero-gestation. It will never be possible to secure statistics approaching to accuracy on this subject. By adding the number of still-births in the above table, from the seventh to the tenth month inclusive, and comparing them with the whole number of live-births, it is found that in this city, for the past fifteen years, the number of still-births is to the number of live-births reported, in the

proportion of 1 to 13.59. Out of 8,000,000 births, quoted by Tidy from the *British and Foreign Medical Review*, it would appear that from 1 in 18 to 1 in 20 are still-born. Dr. Sozinsky, in the *Medical and Surgical Reporter*, April 4, gives a table from Quetelet, having the proportion of still-births in six cities, including London and Paris. Stockholm had the smallest proportion of still-births (1 in 36), while Strasburg had the largest (1 in 11). As regards sex, it is the general experience that a larger percentage of males than females are born dead. Of the 35,639 cases, 20,035 were males, 15,298 were females, and in 306 the sex was not stated. The proportion of males to females is here as 1.30 is to 1, the former being thus not quite one-third in excess, including the comparatively small number of miscarriages reported. This is about the proportion found in other places. A number of causes may be considered as operative in the production of this inequality, such as the fact that there are more births of males than females, and that male infants are often of larger size than females, which increases the time and difficulty of labor. With reference to the period of the year that still-births occur with the greatest frequency, Dr. Sozinsky has published some interesting statistics, based upon the average number of cases occurring in Philadelphia for each month during a period of ten years. According to his figures, May is the month that has the largest number of still-births in proportion to the whole number of births, while in September the still-births are fewer than in any other month, although its whole number of births are larger than in many other months. After September, in which the infant has the best chance of not being still-born, August comes next, and July next in regard to exemption from this accident. From these figures it appears to the author that the fœtus passing most warm months toward the close of uterine life in its mother's womb stands the best chance of getting out safely. He also thinks that the increasing laxity of fibre produced in the pregnant woman by the heat of summer may prove an aid; also that there may be a difference in the size of the child. The factors that contribute to the production of still-births merit a careful attention. Works on obstetrics do not give sufficient consideration to this important subject.

The following are some of the principal causes assigned by the Board of Health, selected and arranged according to their numerical frequency, from reports as far as they have been received: "Difficult or protracted labor; accidents (such as falls, frights, etc.); sickness of mother (uræmia, convulsions, remittent fever, phthisis, malarious diseases, liver diseases, anæmia, asthenia, etc.); funis disarrangements (compression on cord and around the neck, etc.); placental diseases (fatty degeneration, detached placenta, etc.); asphyxia, hemorrhage (flooding); malformation of child (hydrocephalus, spina bifida, etc.); uterine diseases (cancer, metritis, inertia, etc.); atelectasis, constitutional disease of parents (syphilis, scrofula, etc.)." Not a few of the above causes can be avoided by skilful watching and care. Although syphilis is mention last in the above list, it may be reckoned, together with a faulty pelvis as an extremely frequent cause of still-birth. A large proportion of the still-births occurring in this city take place in tenement-houses, in the practice of ignorant midwives. Such accidents occur not only from a lack of proper anatomical and physiological knowledge on their part, but from the too general employment of the ergot of rye to hasten labor. This powerful drug should never be employed in any but careful and experienced hands. It is well known that it produces a tetanic contraction of the uterus, entirely unlike the normal rhythmical action of that organ during parturition. As a result, the infant is soon killed by the constant and unnatural pressure to which it is subjected. Every old woman who goes out to attend a confinement is supplied with her bottle of ergot, which she is not afraid to use. Indeed, some midwives enjoy quite a reputation in tenement-house circles, as possessing medicines that will hasten the pains and get a woman out of her suffering quickly, although it may be at the expense of a badly torn perineum and a still-born child. Some years ago I was called to see a woman in labor on the west side. The head was coming down on the perineum, and the pains, although progressing rather slowly, were still fairly effectual in gradually and safely producing extension. The woman, however, soon lost all patience, and complained bitterly that I was doing nothing to hasten her labor; she said she knew of a midwife in the neighborhood that had medicine to quickly terminate the pains. As her friends sympathized with her feelings, the midwife was sent for, and I retired after refusing to interfere at that stage of the labor. Some time afterward I learned that the woman had died a few days after the confinement, doubtless from a badly detached placenta, and a torn vulva and vagina. What became of the child I never heard. In this case there is no reasonable doubt that, with ordinary care and skill, the labor would have terminated safely and satisfactorily, but the uterus was probably overstimulated by repeated doses of ergot.

I cite this question as a fair example, and doubtless most practising physicians have had a like experience. The midwife question is a very important one in some of the poorer and densely populated districts of this city. A very large number of women are solely dependent upon these persons for help during confinement. It seems only right, therefore, that the practice of midwives should be regulated in some way. A legal sanction or license should be required, and attendance in confinement without such authority be made a punishable offence. I do not think this important question is much helped by institutions intended to give midwives a smattering of obstetrics. No rigid examination need be required, as a large proportion of labors progress safely, and require no great skill on the part of the attendant; if midwives can simply be taught routine treatment, and be able to recognize malpositions, and like emergencies, in time to send for help, the poorer women of the community will be much benefited, and the number of still-births lessened. In this city the still-births among foreign-born parents, who depend largely upon midwives, is more than double the number occurring among native-born people. The most satisfactory way of regulating the subject of midwives is a fair subject of discussion in this Society, and a proper solution of the question will not only lessen the number of still-births, but prevent much malpractice.

The law in relation to still-births and live-births is a subject for consideration. According to Tidy, the law has not defined live-births except by the decision of the judges. He gives the legal definition to be the manifestation of some certain sign or signs of life by the child after it is completely born. This does not imply that the placenta and cord shall have been delivered, but the child itself must be completely external of the mother. The following evidences of life immediately after birth are given: Muscular twitchings, respiration, crying, pulsation in cord, and beating of the heart. A case is cited in which mere muscular twitching, independently of breathing and other vital phenomena, was decided in the affirmative to constitute a sign of life in a case of disputed still-birth. There should be more of a correlation between law and physiology in this matter. According to the law, as stated above, an immature fœtus of five months, in no sense viable, may, by a few muscular twitchings immediately after birth, show an ephemeral spark of life, but, according to legal tests, approved by decisions of judges, be considered a live-birth. Supposing, on the other hand, a child at full term, whose head and shoulders have been born, cries lustily and shows other undoubted signs of vigorous life, yet, if by accident or design, death takes place before the feet have left the vulval ring, it is legally not a live-birth, but a still-birth, with all the consequences that the latter may entail. It

is obvious that there must be some legal distinction between still-births and live-births.

Much legal as well as physiological confusion would be prevented if some factor allowing of individual life, independent of the mother, should be taken as a test of live-birth. The immediate environment, whether it be the vagina of the mother or the lap of an old woman, may be considered non-essential so long as the infant has been sufficiently extruded to begin the physiological processes that will allow of a separate and independent life. Respiration, which results in an independent oxygenation of the tissues of the child, should be the only legal test of live-birth, as, without this function being performed, existence apart from the mother is impossible. Beating of the heart alone should not be considered a test of live-birth, as this takes place "in utero," and soon stops after birth when the circulation through the umbilical cord is checked. Leishman states that the lungs enter upon their function immediately upon the birth of the child, and when anything occurs to prevent the speedy occurrence of the respiratory act, the child is still-born. When the seat of respiration changes from the placenta to the lungs, independent life begins. After birth, if the heart beats but the child does not breathe, it is still depending upon that intrauterine lung, the placenta, for oxygenization, and hence is living under the same conditions as before leaving the womb. The child is alive, but in the same sense as it was alive before birth, and if death takes place without respiration, it should be considered still-born. It is stated in Beck's "Jurisprudence" that when a child is born alive, but has not yet respired, its condition is precisely like that of the fœtus "in utero." It lives merely because the fœtal circulation is still going on, as none of the other organs undergo any change. The lungs remain as they are in the fœtus, and the organs circulating the blood are in the same state. In Germany (Wharton and Stillé) a distinct vocal sound is required by law as the evidence of life. This appears, however, to be modified in practice by the substitution of breathing for vocal sound, and the doctrine is accepted that respiration and life are reciprocally evidences of one another. The Scottish law (Abercrombie) requires that a child must have cried after its entire birth before it is considered to have been born alive. A few apparently authentic cases are on record in which slight respiration has taken place before birth, with the head at the superior strait or in the vagina. It may fairly be considered doubtful whether the feeble sounds heard in a few cases have really been produced by the fœtus; but still, to avoid legal complication, respiration after the child has *begun* to be born should be considered the test of live-birth. As the law now stands, a child may breathe freely when it is two-thirds delivered, and yet not be accounted born until fully expelled from the mother.

The disputes in relation to still-births and live-births have arisen principally in connection with infanticide, and the law known as tenancy by courtesy. By the latter it is understood that when a married woman dies without children her property passes to her heirs-at-law, unless she shall have given birth to a living child during her married life; in which case her husband becomes a tenant by courtesy for life of her estate. Washburn on "Real Property" (vol. i.) states that in most of the States where courtesy is allowed, great strictness is required in the proof that the child was actually born alive in the lifetime of the mother. In the case of Marsellis *vs.* Thalhimer (Paige's "Chancery Reports," vol. ii.), it is stated that the party who claims property through the child is bound to establish the fact that it was born alive; and if the child never breathed there is no legal presumption in favor of the fact. The peculiarities of the law in regard to live-births are most markedly seen in connection with infanticide. To convict of this crime it is necessary to show that the infant was killed after birth of the whole body, even if it breathed and cried before complete extrusion. Tidy well states that to require the body of a child to be entirely external to the body of the mother before being considered legally born, is a physiological absurdity, and a direct encouragement to child-murder. He cites an instance in which there was actually drawn a distinction between physiological life and legal life, Erle, E. J. (R. *vs.* Christopher, Dorset Lent Assizes, 1845). As a result of this distinction, a man who had cut off the head of a child while it was being born was acquitted of infanticide. Again, if a child that has been born, but does not breathe, exhibits a slight beating of the heart, and is then destroyed, the perpetrator is guilty of child-murder, although continued existence may have been impossible. Wharton and Stillé state that while it is not enough for the child to have breathed, unless the whole body was brought into the world, and while more than one learned judge has expressly ruled there must be an entirely independent circulation; on the other hand, fifteen judges have united in holding that to constitute such an independent existence, so as to constitute murder, it is not necessary that the child should have breathed, nor that the umbilical cord should be severed. It would save possible injustice, as well as confusion, if, in the distinction between still-birth and live-birth, respiration be adjudged to be legally the essential condition of life.

29 West Forty-Second Street.

HYPERTROPHY OF RIGHT HEART, WITH DILATATION—ITS RELATIONS TO ABORTION AND DEATH.

By A. G. BROWNING, M.D.,
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Cases like the following, while not exactly rare, possibly are enough so to arrest attention. Without reference to frequency, the teachings seem to me of practical value.

October 15th.—Was called by Dr. J.T. Strode, of Maysville, in consultation. Case: Mrs. S——, aged thirty, rather frail, thin, and anæmic; nervous temperament; four months advanced in first pregnancy. Though long subject to nervous vibrations, had enjoyed fair health up to a year ago, when she had a prolonged attack of malarial fever, since which and her subsequent pregnancy she had sharp turns of palpitation and dyspnœa upon slight exertion. It was for a pronounced attack of this kind that Dr. S. was called, and there being that in the condition which, giving merely functional possibilities due weight, led him to believe in structural lesion, and to thoroughly explore in consultation.

The resulting diagnosis was, hypertrophy of right heart, with dilatation. The distinctive features of this condition were well marked: area of cardiac dulness largely increased transversely; apex beat in sixth interspace; feeble and intermittent heart-beat; epigastric pulsation and disordered rhythm. The ultimate and more grave results of all this were becoming manifest in the deranged pulmonary circulation, as shown by dyspnœa, cyanosis, and commencing œdema. The situation compelled a discouraging prognosis, and reduced treatment to the merely palliative. Digitalis, quiet, nourishment, and fresh air was the prescription.

October 16th.—Patient a little more comfortable; the digitalis had steadied the heart-action somewhat, and there was an expression of more general ease—that was all. Digitalis, a little wine, and nourishment.

October 17th.—9 A.M.: Condition essentially the same—a shade more œdema; some puerile respiration over anterior chest-wall, with corresponding dulness and mucous râles posteriorly; dyspnœa and cyanosis much the same. Some unrest, but mind clear; temperature normal, strength fair; no other change perceptible—certainly nothing indicative of abortion, for which an eye was kept. Urine now taken for examination, but owing to early subsequent events was not tested, and the material finally misplaced, which, in view of all points involved, is to be regretted. Digitalis, with appropriate nourishment and absolute rest.

Were hastily recalled at 11, A.M. Patient had aborted; the whole time from initial pain not exceeding forty minutes. The placenta remained, but came away readily. Hemorrhage free, only in view of the condition, the fluid being dark and non-coagulable. The uterus was somewhat flaccid even under ergot, and some wasting continued for a time. The prostration was now extreme, and so continued at 9 P.M., the time of our last visit, notwithstanding external warmth and general stimulation. At 2 o'clock next morning, fourteen hours after aborting, she asked to be turned in bed, and in the movement died without a struggle.

As I see it, here we have the condition precedent—the heart-trouble; as the incident, the death of fœtus and expulsion; as the resultant, hemorrhage, which, in the condition, necessarily meant death to the patient.

Confessedly this was an extreme case—so near the border-line that both the rational and physical signs might suggest a question whether or not the heart-trouble had culminated, resolving all that followed into mere mortuary phenomena? Nay, that the collapse, from whatever cause, might have been followed by like results? But there was that in the general and special condition, which, minus the determining factor—hemorrhage—forbade the idea of immediate dissolution; plus the same, death was a logical and necessary sequence. Even though the patient were *moribund*, abortions with hemorrhage have been known to occur in the asphyxia—the agony of death—as in coma from cerebral apoplexy, where the presumption was strong that no other cause than that of toxæmia was at work (Barnes). But it is fair to assume, in view of the conditions actually present in this case, that the uterus was responsive, through natural channels, to excitation, and was yet capable of physiological action; that the modus was dynamic rather than static.

And if so, I may present this case in illustration of the theory that heart-disease, through the toxæmia of carbonic acid, becomes a centric cause of fœtal death and consequent abortion. And with the hope, too, if accepted as typical, of erecting a landmark in practice, visible and intelligible to those who may be so unfortunate as to encounter like conditions.

In relation to the premises, views have changed somewhat, or advanced, since the time of Sir Charles Bell, who taught that among the maternal causes of abortion anæmia was frequent, and this through deficient blood-supply to the spinal cord. Brown-Séquard, however, demonstrates that the respiratory movements are not so efficient in the anæmic condition, hence the accumulation of carbonic acid, hence toxæmia, hence spinal excitation and the resulting abortion. Barnes accepts the reasoning, and assigns some forms of organic heart-disease as an active factor in the production of abortion, explained by the action of carbonic acid thus produced upon the uterine fibre, "or through the direct irritation of the diastaltic centre, and partly through the extravasating property acquired by the blood." While the heart-lesion in this case is not specified as a causative in abortion, dilatation of the right heart is, *per se*, the condition in a line with the theory. The engorged fœtal circulation, enlarged liver, congested kidneys constipated bowels are all tributary to the pulmonary stasis producing the tormenting cough, difficult respiration, serous effusion, and fatal cyanosis.

There is no more fruitful and unerring source in the organism for the alleged toxic agent carbonic acid.

It is not pertinent here to investigate the origin and trace the development of the heart-trouble. Theory and teaching would indicate that some obscure valvular lesion, as in other cases, was at bottom of it. And if it be correct that hypertrophy is a conservative process, the disturbed compensation likely occurred during the attack of fever, since which real trouble—synonymous in this case with dilatation—began.

The *rationale* of the movements seems to me clear: the abortion, hemorrhage, and death were logical sequences of toxæmia from carbonic acid, and this induced by hypertrophy with dilatation of right heart, the hemorrhage being the determining factor in the cardiac struggle. I should expect every unfortunate, under such circumstances, to die, and it is something to be able to say so in advance. While familiar with the theory in the premises, I would have been obliged to some one for details of a case in practice. Hence this, with a well-meant purpose.

Clinical Department.

A CASE OF BRANCHIAL CYST.

DR. C. E. BUSEY, of Lynchburg, Va., gives the following report of one of these rare cases:

"In presenting this rare case of congenital tumor of the neck, I will only give its history and treatment, and refer the readers to Dr. Henry Dwight Chapin's excellent article, published in THE MEDICAL RECORD, July 25, 1885, giving the history, treatment, and embryology of two cases. A five-year-old boy was brought to me by his father to consult about a diffused fluctuating swelling, situated under his right lower jaw, which had been growing for six months, and when first noticed by his mother it was the size of an almond. As the little fellow had always been perfectly healthy, and had never complained, his parents paid no attention to the enlargement until it reached its present size. Becoming alarmed, they brought him to me for treatment. Upon examination, I found a growth about the size of an egg situated under the right lower jaw. Free manipulation produced no pain or discomfort. Skin, mouth, and teeth were found to be in good condition. No history of an injury. Family history good. Suspecting a congenital cyst, I introduced a hypodermic needle, and withdrew a straw-colored fluid, which, upon microscopic examination, was found to contain epithelial cells, confirming my suspicions. The introducing of the needle and withdrawal of fluid set up an active inflammation, which caused the tumor to decrease and disappear."

Progress of Medical Science.

DANGERS OF ANTITHERMIC REMEDIES.—In a recent therapeutical conference Dr. Dujardin-Beaumetz discusses resorcine, kairine, thalline, and antipyrine, and advises caution in the use of the first three agents especially, from their active toxic effects. After referring to the eminently antiputrefying and antifermentative properties of resorcine, he states that he had used it in pyrexia without obvious effects, probably on account of the smallness of the dose. He finally abandoned it altogether in the treatment of rheumatism and typhoid fever, not so much on account of its want of power as because he observed toxic symptoms. Resorcine is not only an irritant, it is also a toxic agent; and in his experiments upon dogs it was determined that a dose of two and one-half grains per pound of weight of the animal produced convulsive phenomena, and death was caused when the proportionate dose was increased to eight grains. After death, visceral congestions were discovered, and especially very intense pulmonary engorgement, as in animals poisoned by carbolic acid. Man is even more susceptible to the effects of resorcine than dogs. Munel reports a case in which a single dose of fifty-three grains rapidly induced a condition of great gravity, which, however, was finally overcome. Dr. Beaumetz says: "While recognizing resorcine as less toxic than phenic acid, I conclude that it is a dangerous antithermic agent, for I found in my typhoid patients treated with resorcine the same depression of fevers, the same adynamia, the same pulmonary congestion, which I had found in those to whom I had administered phenic acid. I

have therefore abandoned this medication, and I believe that, even in Germany, resorcine is not much employed internally, but it remains, on the contrary, a very valuable remedy for external use in the treatment of unhealthy wounds." Kairine is an antithermic, acting by diminishing the respiratory power of the blood and destroying hæmoglobin. The recent researches of Brouardel and Paul Loye confirm this view, and show that thalline and kairine exert the same destructive effect upon hæmoglobin. Moreover, contrary to the usual action of antithermic agents, kairine and thalline have no influence whatever upon fermentations. "Kairine should therefore be rejected from therapeutics; it is a dangerous drug, since it only produces antithermic effects by destroying the hæmoglobin and profoundly altering the blood, circumstances which should be avoided in the infectious febrile diseases." Antipyrine is less toxic than either resorcine or carbolic acid. While it takes eight grains of resorcine per pound to kill a rabbit, it takes thirteen grains of antipyrine. The toxic effect, moreover, is almost the same; it produces tetanic and paralytic symptoms analogous to those caused by strychnine-poisoning. It cannot be doubted, therefore, that antipyrine acts upon the cerebro-spinal axis, and it is probable that it lowers the temperature by modifying the nervous heat-centres. Contrary to kairine, antipyrine does not appear to change the liquor sanguinis, and particularly the hæmoglobin. It has also hæmostatic properties which Henoch declares superior to those of ergotine and of chloride of iron. (This is worth bearing in mind in treating hæmoptysis.) Antipyrine diminishes the urinary secretion, but increases the action of the glands of the skin, which renders it inconvenient to use in cases of tuberculosis. Like the phenols and oxyphenols, antipyrine is an antiferment. The study of recent antithermics shows that the effects of these new agents vary with the nature of the fever: a temperature of 104° in a phthisical patient will be lowered by eight grains of antipyrine, while in a typhoid case it might be without effect.—*Philadelphia Medical Times*, October 3, 1885.

Vesical Irritation of Reflex Origin.—Dr. Emil Schlegel reports in the *Algemeine Medicinische Central Zeitung*, of October 3, 1885, the case of a man, fifty-one years old, who had suffered for years from an extremely irritable bladder, for the relief of which he had tried many remedies without avail. The urine showed nothing abnormal, and for a long time the case baffled the skill of several physicians. Finally the writer discovered accidentally that the prepuce was rather tight, and that beneath it was an old accumulation of smegma. This was removed, and in a very short time the patient was relieved completely of his distress.

"Ideal" Cholecystotomy.—In the *Weekly Medical Review*, October 31, 1885, Dr. A. C. Bernays, of St. Louis, reports a successful case of cholecystotomy, upon which he bestows the epithet "ideal," for various reasons sufficient unto himself. The case was one of cholelithiasis, with impaction of a calculus in the cystic duct. The gall-bladder was first tapped, then incised, and after cleansing with ordinary water was stitched by seven ordinary silk sutures and eight Lembert sutures. The latter were intended to embrace only the peritoneum, and perhaps some fibres of the muscular coat. They were applied in such a manner as to completely cover the simple interrupted sutures. No "antiseptic tricks" were called into requisition. The patient made a rapid and complete recovery. From a critical study of this case, and similar ones scattered through the literature of the subject, the author is led to formulate the following conclusions: 1. The causes which indicate an operative interference with the system of gall-vessels are: *a*, jaundice; *b*, paroxysmal pain, or a tumor in the right hypochondriac region; *c*, suppuration; *d*, peritonitis; these conditions to be either severally or singly recognizable, the presumable origin being biliary calculi; *e*, malignant disease. 2. Explorative laparotomy must be preferred to acupuncture or aspiration as a diagnostic measure. 3. The incision in the linea alba is preferable when there is much doubt regarding the seat of obstruction, because the larger ducts can be reached much better from this incision than from the incision parallel to the free border of the ribs. 4. The escape of bile through an abdominal fistula is not injurious to the process of normal digestion. The bile is an excretion, and probably of no more use in the intestinal canal than the urine in the bladder. 5. Jaundice, when caused by an obstruction of the common duct, is no contraindication to natural cholecystotomy. We may often save life by its early performance. 6. Cholecystotomy, natural and ideal, and cholecystectomy, are the three operations at our service; cholecystenterostomy may be useful, but it has not yet earned a place among approved surgical procedures. 7. Ideal cholecystotomy is indicated when the bladder is normal in structure and when the gall-ducts have been cleared of obstructing calculi. 8. Natural cholecystotomy is indicated when the bladder is ulcerated or suppurating, or when there are permanent obstructions beyond reach at the time of operation. 9. Cholecystectomy should be limited to cases of otherwise incurable or malignant disease of the gall-bladder.

Gonorrhœal Urethritis in Children.—In the *Jahrbuch für Kinderheilkunde*, Dr. Widmarth describes two cases of gonorrhœa occurring in little girls. The first case was that of a little girl two years of age, who suffered for a long time with purulent conjunctivitis and also with a discharge from the vagina. Microscopical investigation revealed gonococci in both secretions. The child's mother had given birth to an infant six months previously, which manifested a severe conjunctivitis on the third day after birth. The mother herself suffered with suppurative adenitis in both groins two months after her confinement, and somewhat later with a sensitive tumor attached to the uterus. The secretion from her urethra contained gonococci. The father had had gonorrhœa. The second case concerned a girl, aged twenty months, who had long suffered with a purulent discharge from the genitals. The urethral secretion contained gonococci in abundance, and there had been a purulent conjunctivitis soon after birth. The mother's urethral secretion contained gonococci, and the father knew that he had previously suffered from gonorrhœa. It was not possible to say, in these two cases, exactly how the contagion had been communicated. The author thinks it may have been due to the use of the same sponges for washing by both mother and child. Sonden has reported two cases of vulvo-vaginitis in children of six and five years. In both cases gonococci were found in the secretions. The origin in the first case could not be ascertained; in the second it was found that the mother, who was pregnant at the time of examination, had suffered for a long time with a purulent discharge from the genitals. The father was not examined. The author also found gonococci in the urethral secretion of a boy eight years of age, and also in that of the boy's sister, who was nine years of age.

The Treatment of Diseases of the Lungs by Pneumatic Differentiation.—The pneumatic cabinet appears to be finding favor with the profession, as applicable to the treatment of pulmonary disease. In the *Journal of the American Medical Association*, November 7, 1885, Dr. A. S. Houghton, of Chicago, records his experience with this method in a series of thirty-four cases. He concludes from the study of these cases that: 1. Pneumatic differentiation is of undoubted service in all conditions of primary infiltration. 2. Where the febrile movement has been unchecked for many weeks before treatment, improvement, if any, will show itself within the first ten or twelve applications; if there is no abatement of symptoms its continuance is of questionable utility, and it may be absolutely contraindicated. 3.

That phthisical disease at the apices is more favorably treated than when at the base of the lungs. 4. That it is possible by this means to more thoroughly medicate the lungs than by any other known method. 5. That the expansion of the lungs by differentiation is itself a therapeutic measure of great merit. 6. That peri- and inter-vesicular exudation is capable of cure by this method, and even third-stage phthisis is benefited, at least temporarily. When the febrile movement is excessive, or when the evidences of septicæmia are pronounced, it is not wise to use the pneumatic cabinet.

Wound of the Gravid Uterus, with Reproduction of the Amniotic Fluid.—At the Italian Congress in Perugia Dr. Chiara related a case of a woman, thirty-four years of age, who had a large abdominal tumor. It had been noticed for about four months, and was bilobular. The left lobe was of the size of an orange, and fluctuating; the right was less distinctly fluctuating, and extended as high as the hypochondrium, being apparently inseparable from the uterus, the neck of which was small. There was complete amenorrhœa. Pregnancy was at first suspected, but this diagnosis was afterward rejected. A trochar was introduced into the left lobe, and about thirteen ounces of a slightly albuminous fluid was withdrawn. A second puncture gave exit to a reddish gelatinous fluid. A diagnosis of cystic sarcoma was then made, and an operation was decided upon. Laparotomy was performed, and, one lobe being punctured, a fœtal head was discovered. The other lobe, the real tumor, having chocolate-colored contents, was then removed, and the wound of the uterus was closed with sutures. Labor took place later, and presented nothing abnormal; and although recovery was slow, it is now complete.—*Journal d'Accouchements*, October 30, 1885.

Fracture of the Ribs from Muscular Action.—At a recent meeting of the Hospitals Medical Society of Paris, M. Desnos reported two instances of this rare accident (*La France Médicale*, October 20, 1885). The first case was that of a man, thirty years of age, who suddenly felt something snap on the left side of the chest during a violent fit of coughing. Examination showed fracture of a rib. The man had received no injury, and no other explanation for the occurrence of the fracture could be found than muscular action. The second case was very similar to the first, the rib being fractured during an attack of coughing. This patient was sixty years old. Although both these cases occurred in male subjects, the accident is more common in females. That sneezing is not always a harmless act is illustrated by the following case, reported by Dr. Hal C. Wyman in the *Journal of the American Medical Association*, November 7, 1885. "Mr. M——-, aged 72 years, remarkably vigorous and healthy for his years, summoned me hastily for relief of severe pain in his right side, which had commenced suddenly after sneezing with unusual force. I found him standing, supported by a chair, his face pale, his breathing difficult and provoking cries, with pain in the lower part of the right side. I suspected pleuritis and neuralgia, and was surprised on placing my ear on his chest to hear distinctly the crepitus peculiar to fracture of bone. Further examination showed a fracture of the eighth rib near its angle. The treatment consisted in placing three strips, fourteen inches in length, of Seabury & Johnson's rubber adhesive plaster obliquely over the right side, crossing the ribs at right angles. The plasters were adjusted with sufficient firmness to draw the ribs snugly together, and to limit the motion of the fractured one. Recovery was prompt, and without complication. This case is of interest because it was unquestionably caused by sneezing, and the fact that sneezing is not usually referred to as a cause of fracture of the ribs. A glance at the mechanics of sneezing will show that two powerful sets of muscles may be brought into antagonism in a way to expend their opposed forces upon the ribs, making the fracture simply a mechanical matter. The treatment by means of plasters having some permanency of adhesive power has proven in many cases of fractured ribs, as it did in this one, a great advantage over the old method of a broad bandage encircling the chest. It permits freedom of motion on the uninjured side of the chest, while it insures sufficient immobilization of the fractured bone to control pain and favor union. It is said that insane persons are particularly prone to fracture of the ribs, and that sneezing among them is not infrequently the cause."

Treatment of Umbilical Hernia.—The following simple method is recommended by Dr. Archambault (*Journal d'Accouchements*, October 30, 1885). A piece of white wax is rolled between the fingers into a little ball the size of a marble. It is then cut in two, and one of the halves placed, with its convex side down, into the umbilical depression, and retained there by a strip of adhesive plaster. In an hour or two the little hemisphere becomes sufficiently softened to adhere to the skin, and thus answers as a truss, without any other support.

Antiseptic Treatment of Croup.—The following is a plan of treatment recommended by M. Renon (*Journal de Médecine de Paris*, October 18, 1885). The patient is placed in a well-ventilated room of medium size, the temperature of which is maintained at from 68° to 75° F. Upon an oil-stove is kept a vessel, of a capacity of two quarts, in which the water is constantly boiling. Into this is put, every three hours, a tablespoonful of a mixture of salicylic acid, 56 parts; benzoic acid, 112 parts; carbolic acid, 280 parts, and alcohol, 468 parts. The stove is placed near the bed, and the steam impregnated with this mixture is conducted, by means of suitably arranged curtains, to the patient. The patient is kept in this atmosphere until the symptoms have entirely disappeared, and for two or three days after; and, if tracheotomy has been performed, until the wound is closed. A close watch should be maintained over the case, and if any symptoms of poisoning are manifested, the quantity of carbolic acid should be diminished.

Hypertrophy of the Male Breast in Pulmonary Phthisis.—At the meeting of the French Association for the Advancement of Science, at Grenoble, M. Lendet read a paper upon certain changes in the mammary glands of men suffering from pulmonary tuberculosis. The glands themselves are not tuberculous, but they become swollen, and present as tumors, having a diameter of from one to two inches. The skin covering the breast is unchanged in color, and the subjacent connective-tissue preserves its normal character. The gland is the seat of severe pain, which radiates over the entire chest-wall. The breast upon the side where the tubercular lesion is most marked is the one more especially involved, though not infrequently both glands are enlarged. The condition is one of congestion, and is never accompanied with lymphatic enlargement. It usually exists for several months, and terminates in slow resolution without suppuration.

Repeated Attacks of Erysipelas.—M. Verneuil read a paper on this subject at a meeting of the Surgical Society of Paris (*Journal de Médecine de Paris*, October 25, 1885). Regarding the cause of repeated attacks of erysipelas occurring in the same individual, he said that it was easy enough of explanation when there was contact with other cases of the same disease, but in an instance like the following the cause was less easily discoverable. A Sister of Charity had had twelve attacks of erysipelas in eight years, the disease returning without any apparent cause, as the Sister had had nothing to do with others suffering from the same affection. On examining the patient, M. Verneuil found a number of eczematous scales on the scalp, and some little cracks in the skin between the pavilion of the ear and the head. He thought that in this case the microbes of erysipelas inhabited the scalp and found admittance from time to

time as new cracks formed behind the ear. He related also other cases of a similar nature, from a study of which he had come to the conclusion that the erysipelatous germs may exist for an indefinite period on certain portions of the body, and then the disease manifests itself anew upon the appearance of the slightest abrasion. He advised a thorough disinfection of the whole body in every individual who had suffered from an attack of erysipelas in order to prevent relapses. In contrast with these views, however, are those expressed by Dr. Labastide in an article on perversion of nutrition published in *L'Abeille Médicale* of October 26, 1885. He relates the case of a lady, fifty-seven years of age, who had suffered for many years from repeated attacks of erysipelas, recurring at very short intervals and excited by the slightest causes. The patient had tried various modes of treatment for years, but always without success; and her existence was one of misery, for she never knew, on going to bed, whether she would awake with a red face or one of natural color. It was noticed, however, that emesis and purgation shortened the attacks somewhat, and it was also ascertained that the patient suffered much from acid eructations. It was conjectured that the repeated attacks of erysipelas were dependent upon disordered digestion and malassimilation, and as a corrective of this condition pancreatine was ordered. During the five months which had elapsed since this treatment was begun there had been no erysipelatous attack, and the patient had improved in every way. The result of treatment in this case led the writer to believe that the cutaneous affection was directly dependent upon a perversion of nutrition.

Hemorrhagic Pleurisy.—M. Sorel reports several cases of this disease, having in their origin a common factor, viz., a state of malnutrition consequent upon want, overwork, alcoholism, or a pre existing disease. The dyscrasia so produced was the predisposing cause of the hemorrhage, which was caused directly by the rupture of the fragile vessels in the newly formed membranes. There was no pathognomonic sign of this condition, and its presence was determined only by puncture. The gravity of the prognosis results rather from the state of the general nutrition than from the hemorrhagic nature of the effusion. As regards the therapeutic management of such cases, the prime indication is to promote, as far as possible, good nutrition, and thus remove the causal conditions.—*L'Union Médicale*, October 15, 1885.

Discoloration of the Skin following the Use of Arsenic.—In a number of children who had been taking arsenic for various troubles, during a period of four or five months, Dr. Guaita observed a bronze hue of the skin, recalling that of Addison's disease. This discoloration began on the neck, and extended thence to other parts of the body; it was less marked on the face, legs, and back than on the abdomen, chest, and upper extremities. The arsenical preparation employed was Fowler's solution. The coloration of the skin usually showed itself during the fifth month of the use of the drug, and sometimes first appeared several days after the remedy had been discontinued, and disappeared after desquamation in about four weeks. All the patients were children of people in easy circumstances, and were from two to ten years of age.—*Annales de la Société Médico-Chirurgicale de Liége*, No. 9, 1885.

The Seat and Force of the Cardiac Pulsations.—Drs. De Renzi and Reale have been studying for some time past the differences in location and force of the cardiac pulsations in various diseases of the heart and great vessels. The conclusions arrived at by them from the study of a large number of observations, and published in the *Rivista Clinica e Terapeutica*, No. 9, 1885, are as follows: 1. In *pericarditis* the heart beat is usually strong and is seen to the left of the median. 2. In *mitral insufficiency* it is weak, and found in the fifth intercostal space, or, in exceptional instances, in the sixth; in about one-half the cases it is to the right of the through mary line, and in the other half, on the line to the ning the it. 3. In *mitral stenosis* the pulsations are u- r aid. strong and accentuated, and are almost always loca ces. in the fifth intercostal space and to the right of the mammary line; very rarely they are seen in the sixth en space or to the left of the line. 4. In *aortic insufficiency* they are strong and often expansive; most frequently they are found in the sixth intercostal space, less often in the fifth, and very rarely in the seventh, and almost without exception to the left of the mammary line. 5. In *aortic stenosis* the heart-beat is feeble, and situated, as a rule, in the fifth space to the left of the mammary line. 6. In one case of congenital *pulmonary stenosis* the beat was of moderate intensity, situated in the fourth intercostal space, between the parasternal and mammary lines. 7. In *aneurism of the thoracic aorta*, the cardiac pulsations were found nearly always in the fifth space, and to the left of their normal seat. 8. In comparing the different pulsations, it was found that they were pushed to the left in relative hypertrophy of the right ventricle, and downward in eccentric hypertrophy of the left ventricle; they were strong in eccentric hypertrophy of the right ventricle, and weak in simple or concentric hypertrophy.

Bronchial Urticaria.—Dr. Ruelle reports the following case in *Le Concours Médical* of October 17, 1885. A boy, aged fifteen, was attacked suddenly with a generalized eruption of urticaria, accompanied by fever, œdema of the face, and headache. In the evening his breathing became so oppressed that the writer was sent for in great haste. On his arrival he found the patient suffering from dyspnœa with whistling respiration, but there were no symptoms implicating the lungs; the cutaneous eruption had disappeared. In about half an hour the dyspnœa subsided, and then the eruption on the skin returned. The following day the same alternation of symptoms occurred, and then the trouble ceased. The author believes that the dyspnœa was due to an urticarial involvement of the bronchial mucous membrane.

The Danger of Phenic Acid Injections in Typhoid Fever.—Dr. Villebrun reports several cases of very grave toxic symptoms occurring in children after the administration of carbolic acid in enema. In one case, that of a child aged six, less than seven and a half grains was given; and in another, aged eight, not much over three grains. Both these children showed very marked symptoms of poisoning, profuse sweating, coldness of the extremities, and loss of consciousness, and reaction took place only after several hours. This hardly bears out the statement made by M. Desplats before the Paris Academy of Medicine, in 1880, that from fifteen to thirty grains of phenic acid could safely be given in rectal injection. In another instance the author ordered for a patient, aged sixteen, seven and a half grains in six ounces of water, a teaspoonful to be taken internally every hour; but after the third dose toxic symptoms declared themselves, and the administration of the remedy had to be suspended.—*Le Concours Médical*, October 17, 1885.

Prostatic Calculi.—At a recent meeting of the Surgical Society of Paris, M. Reclus reported the following case (*Revue Médicale*, October 24, 1885). A patient who had just had an attack of renal colic passed fourteen small stones by the urethra. Upon the introduction of a sound an obstruction was found at the level of the prostate, and as the instrument passed there was a sensation as if it were going over a number of roughened bodies. There was no stone in the bladder. Rectal examination revealed the presence of a hard swelling in the prostatic region. A perineal incision was then made on a guide, and 32 calculi, weighing 730 grains, were extracted; two of these were adherent, and were removed with difficulty.

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THE PENALTY FOR REPORTING CONTAGIOUS DISEASES.

THE protest on the part of the medical profession here and elsewhere against the verdict of the jury in the case of the Drs. Purdy, of this city, who were fined for reporting a case of suspected contagious disease to the Health Board is significant in its purpose and far reaching in its influences. The questions involved relate not only to the safety of the community, but to the protection of well-meaning and law-abiding citizens, who strive to carry out the letter and spirit of a statute.

The Health Board as the custodian of the health of the people makes it obligatory on the part of physicians attending suspicious cases of contagious diseases, to report the fact to the said department without delay, in order that proper means may be taken to prevent epidemics. Although the State has no constitutional right to force a physician to do so without recompense, the physician in his turn has tacitly submitted to the imposition rather than openly interfere with a regulation which on its face is calculated to benefit the public at large. The Drs. Purdy conformed with the law regarding a case in their practice. They were called to see a woman with a suspicious eruption and with other symptoms attending the invasion of small-pox. They reported the case to the Health Board. Their diagnosis was confirmed by a member of the Health Department, who by the authority invested in him as agent of the Board, ordered the patient to be transferred to the small-pox hospital. After a stay of two days in that institution the case was said not to be one of variola, and the patient was discharged. Thereupon the said patient sues the physicians for damages to the amount of $10,000. The result of the trial was a verdict of $500 against the defendants.

There were the best of grounds from the symptoms presented at the time of examination for believing the case to be one of small-pox. So much was testified to on the trial by experts. No one acquainted with the skill and experience of the medical attendants would doubt this, even without the bolstering of extra testimony. Nor is it conclusively proven that the case was not one of small-pox which ran a mild course. At best it was the opinion of one set of medical men against that of another. The jury, however, held that there was no excuse for any difference of opinion, and found for the plaintiff.

But allowing that the case was not one of small-pox, what culpability have the physicians in the matter? No law can assume that the judgment of a physician is infallible. Such a proposition is an absurdity on its face, and militates against every principle of law or gospel. No one should be held accountable for his opinion when it is one honestly rendered. The motive is the only thing to be questioned. In the case before us this was beyond criticism, and was clearly in conformity with a higher law than that of the State, that of conscience.

When the report was made, however, and the case delivered to the health authorities, the personal responsibility with the case, on the part of the physicians, was virtually ended. The Health Department represented the State which alone assumes the right of interfering with the liberty of the subject, and by virtue of its power in the premises, took the patient under its jurisdiction solely, and confined her in the small-pox hospital. But then the Health Department cannot be sued. The only seeming chance for redress by a plaintiff for a supposed wrong of this sort, is to sue the physician whom he or she first called in, and who reports the case to the Board. The physician must, under penalty of a fine, report every suspicious case, and if his suspicions are not confirmed, even after the Health Board has taken charge of the case, he is fined or otherwise punished. The attending physician has nothing to do with sending any patient to the small-pox hospital. The Health Board takes the responsibility into its own hands and is alone accountable for damages. What encouragement or protection has any physician for conforming to such a law? It is one-sided from beginning to end; compelling the doctor, as a free and independent citizen, to use his time and his professional ability for the good of the State, not only without pay but without any protection against an ignominious penalty in case a jury shall decide that his unbiassed professional judgment was at fault.

Certainly something must be done to right this monstrous wrong. Already the Medical Society of the County of New York has taken the matter in hand, by showing a determination to test the case still further. There is no desire to cripple the usefulness of the Health Department or to curtail its powers. Such a course would be clearly against public policy. But while the law must be vindicated, the rights of the individual who assists in carrying out its provisions must be jealously guarded.

Unless the State protects the physician against just such penalties as have been inflicted upon the Drs. Purdy, medical men will not only hesitate to report suspicious cases, but may justly decline to take any course which may render them liable to such ignominious trials as the one in question. Certainly a very dangerous precedent has been established by the verdict. The time has apparently come when the martyr's stake can be used as the torch to light up the way to justice.

THE FIRST FRUITS OF CHARITY REFORM.

IT is always gratifying to see the fruits of labor. For months the RECORD has been engaged in a crusade against existing abuses in medical charity. It has given full and free discussion to the various phases of the ques-

tion. Each interested party has had its columns freely open to it, and fair opportunity to state its view of the case. Our aim has been to serve as a medium whereby there might result an interchange of ideas. While advocating no specific plan, we have always encouraged the good points of every plan proposed. In all these ways attention has gradually been drawn toward one existing agency, the efforts of which seemed to be of the greatest practicability. We refer to the Charity Organization Society.

The meeting held last week at the Academy of Medicine, under the auspices of this society, was a memorable gathering. It was the first effort, so far as we know, to bring together a representation of all the interested parties. One of the most interesting features was the freedom and frankness of discussion. The presiding officer, with commendable tact, held the speakers well down to the work in hand. The Charity Organization Society presented itself in the capacity of a clearing-house, through the agency of which there might be an interchange of information between all parties engaged in charitable work. The records of the society's labors speak for themselves. They are most commendable. They have demonstrated theorems regarding charitable work which cannot be ignored by those who are endeavoring to conduct such work upon the lines of true social science. The conclusions adduced are so in harmony with what has so often been expressed in these columns that we may be pardoned for feeling that in this pioneer work our own part has been by no means a small one.

At the meeting alluded to there were four distinct classes represented: the hospital and dispensary trustee, the attending physician, the physician—representing the rank and file of the profession who are not interested in dispensary work (except in so far as it is doing them an injustice)—and the benevolent citizen at large. The gentlemen in attendance were representative men of these several classes in the community, and the tone of their discussion bore out these facts. A wise proceeding was the limitation to a small number of the committee upon whom devolves further action in the work so auspiciously begun. The majority of representation was justly and generously given to the medical profession, who are the greatest sufferers under the present faulty methods of management. They have done more than any other one class to inaugurate the present agitation. Upon their conduct depends future success. The present abuses affect the hospital and dispensary trustee so distantly that from them much cannot be expected. To the average physician these abuses come nearer home. They affect his pocket-book directly. The meeting showed conclusively how deep the feeling on this question has been in the minds of the profession at large. The denunciation of some medical charities whose methods we have lately had occasion to criticise showed that our words had met with a response which will not spend itself in mere words.

From the statements made by the Charity Organization Society, we know that at least one-third of all who apply at our medical institutions for aid are unworthy of free treatment. On the part of the profession it was adduced that the average physician spends at least one-third of his time in charitable work. Representatives were present from several institutions which through the Society have sought information concerning the worthiness or unworthiness of those applying for aid. They have made a fair trial of the Society's resources. The latter when weighed in the balance have not been found wanting. The practicability of the methods employed has been amply demonstrated.

So the first blow has been given to the entering wedge. Many details await arrangement. The conflicting interests of various institutions, with their respective staffs, must be adjusted to each other. This will require time, but it can be done. The work must be thorough, in order to be lasting. No temporary or half-way measures will answer. All parties interested must be accorded a fair hearing. The cheering feature about the whole matter is that at last the community has become aroused to its social peril under present charitable methods. Now can concerted action be taken that shall result in true and lasting reform. We do not believe that a more important meeting has ever been held than the one whose features we have chronicled. If anyone feels that injustice lies in the methods outlined, let him now speak or forever after hold his peace.

THE DANGERS OF THE COCAINE HABIT.

It is asserted by the *Medical and Surgical Reporter* that for a long time while Peru was a Spanish colony the cultivation of coca was prohibited on account of the disastrous effects which the indulgence in it brought upon the inhabitants. We have already, since the introduction of cocaine, learned what these disastrous effects are which the systematic use of that drug induces.

And it is quite time to sound a note of warning, positive and decided, to the medical profession, regarding the administration of cocaine internally.

To some persons nothing is more fascinating than indulgence in cocaine. It relieves the sense of exhaustion, dispels mental depression, and produces a delicious sense of exhilaration and well-being. The after-effects are at first slight almost imperceptible, but continual indulgence finally creates a craving which must be satisfied; the individual then becomes nervous, tremulous, sleepless, without appetite, and he is at last reduced to a condition of pitable neurasthenia.

Some physicians have already fallen victims to the cocaine habit, and quite a number have observed the pernicious effects of this habit upon their patients. Dr. A. B. Shaw, of St. Louis, in the *Weekly Medical Review*, relates experiences showing the effects of the substitution of the cocaine habit for that of morphine, and the evil influence of the continued use of cocaine upon the mind.

Dr. J. K. Bauduy, of St. Louis, has testified to the same effect.

Dr. Louis Bauer, of St. Louis, at the last meeting of the Mississippi Valley Medical Society, described the effects of cocaine on an inebriate. The alcohol habit was destroyed, but a cocaine habit substituted.

The patient, says Dr. Bauer, would take ten grains at one injection. The action of the cocaine ensued in from fifteen to twenty-five seconds, arriving at its height in less than an hour; in two hours the effects were almost en-

tirely gone, and reaction gradually followed. The drug had a very decided and marked effect upon the heart, the pulse rising quickly from its normal standard to one hundred and twenty or one hundred and thirty beats per minute. The cocaine destroyed appetite; it also produced obstinate constipation, lasting many days and hard to overcome. The secretion of urine ceased for the time, and the sexual function was also suspended.

Dr. Bauer thinks that the cocaine habit is at least preferable to the alcohol habit. We believe that it will probably kill more quickly, if that is an advantage.

That cocaine, though often well tolerated, is sometimes poisonous in not very large doses, appears evident from a case reported in the *Chicago Medical Journal*, by Dr. G. W. Kennicott. A young woman, twenty-five years of age, of good constitution, snuffed up about three grains of muriate of cocaine into her nostrils. In fifteen or twenty minutes she became dizzy, her vision became dark, a sinking sensation occurred, with great weakness. When the doctor was called he found the patient in a semi-comatose condition, from which she was easily aroused, and when so aroused her mind was clear. Her temperature was above normal. Her skin was hot and dry. The radial pulse was very rapid, and so weak as to be scarcely discernible. Her pupils were widely dilated. Deglutition and articulation were difficult. There was some dyspnœa. She complained of dryness of her fauces and a bitter taste in her mouth. She complained also of cold shivers, and her teeth chattered, although her temperature was still above normal. Later she became drowsy; her eyes were closed and the muscles of her face affected. There was great weakness; she could not support her head. There was dyspnœa, but it was not severe. There was some nausea, but she did not vomit. She recovered in about three hours under stimulants (brandy and ammonia) and digitalis.

Dr. Merriman writes to the *Ohio Medical Journal* that he has lately seen a gentleman who had been taking cocaine for four months for sick headache, beginning with a drachm of the four per cent. solution hypodermically per diem, and gradually increasing this till at last he was found to be taking from five to seven drachms a day. He was very weak, with a pulse of 100, and his mind was wandering somewhat, as in delirium tremens.

INFLUENCE OF OZONE ON HEALTH.

THE recent paper by Dr. Daniel Draper, of the New York Meteorological Observatory, in which he practically accused ozone of being the cause, or at least the predisposing cause, of pneumonia in New York, has given rise to discussions relating to the hygienic value of ozone in the atmosphere which may eventually throw considerable light on this disputed subject.

It is well known that plants exhale ozone, and if this substance is a predisposing agent to disease the danger of keeping flowering plants in the apartments of a house, especially bed-rooms, becomes apparent.

We are indebted to Dr. Anders and Dr. M. B. Miller for a series of observations pointing to the class of plants which exhale the most ozone, the conclusions showing clearly that it is only flowering plants which have this property, and it was noted that those possessing odoriferous blossoms have this function to the greatest degree.

The result of most of the experiments tended to prove that odorous flowering plants are energetic ozone producers, but that non-odorous possess the function in but a slight degree, the former being more active than the latter. Those, therefore, who believe in Dr. Draper's hypothesis that there is some connection between the quantity of ozone in the atmosphere and increased death-rate from pneumonia, will do well to keep all flowering plants from their dwelling-rooms.

Ozone is found in pine woods, and was considered of such hygienic value that people went miles to breathe it. It is also present in the greatest abundance at the seaside, and in country places noted as health-resorts, and no one has hitherto suspected it of having a dangerous influence.

Chemists show that ozone rarely averages more than one seven-hundred-thousandth part, by volume, of atmosphere. The quantity present being greater in spring than in winter it might be thought that such a small proportion would be inappreciable, but small as it is it certainly makes its presence felt, for in its pure state ozone undoubtedly acts violently on the lung tissue, and it is known to oxidize substances rapidly which resist indefinitely the action of oxygen.

To test the value of Dr. Draper's theory careful records should be kept of the various observations throughout the world, and we trust that such a course will find favor among those in a position to carry out this suggestion.

WHY DOCTORS' BILLS ARE SOMETIMES UNPAID.

ONE reason why bills of physicians are unpaid is negligence in collecting them. This is especially the case when mechanics and other persons of limited incomes are treated. Despite the temptations which constantly beset the honest clerk, and others of his ilk, to dodge pecuniary responsibility through the many avenues of medical charity, there is at first an inclination to pay the doctor, if reasonable opportunities are offered for so doing. Too often, however, the medical attendant, actuated by false pride on one hand and an eagerness for business on the other, allows the money question to be in abeyance until the bill becomes relatively of startling size. The clerk and mechanic, as a rule, are persons who are accustomed to pay small bills, and to do so frequently. They themselves are paid weekly, and if provident, calculate their expenditures regarding board, room rent, clothes, and family necessities to a nicety. They belong to the pay-as-you-go class, although their business is on a small scale. The trouble, however, is that the family physician generally places himself above that scale and suffers accordingly. If his bills were presented even weekly he might have a chance to be served with the same consideration as the grocer, the butcher, and the baker. But he believes it unprofessional to be pecuniarily concerned, and the consequence is that the patient gets into the habit of believing that the doctor's bills are the hardest of all to pay. It does not appear to him that there is so much necessity about it. The doctor by his indifferent manner gives him to understand that there is no pressing necessity about it, and the patient acts ac-

cordingly. The bill consequently runs on until in the course of weeks and months of attendance it amounts to possibly fifty dollars or more. The patient paying week by week for what he is taught to believe by the ordinary tradesmen are his cash necessities has nothing left for the forced luxury of medical services, the large bill becoming a millstone about his neck. If he reasons with himself he must acknowledge that the dues are just, but how to get blood out of a stone is a dreadfully perplexing problem with him. He may possibly commence to economize, in order to offset what he coaxes himself to believe is an infliction, for few men receive a doctor's bill joyously. But pressing necessities for ready cash in his household present themselves and offset his best intentions. The medical attendant in the meantime sends his collector. The latter always arrives at an inopportune moment. He is generally as much out of place under the circumstances as is the skeleton at the feast. He is sometimes not even treated as a friend who comes to help the impecunious sufferer out of difficulties. His purer motives are misinterpreted, and his smiling overtures are received with studied coolness. If he talks of discharging obligations to the doctor, the good wife, who was once sick, is now well enough to take her part. The visits were made oftener than was necessary, at least so she now thinks, and the charges were exorbitant; at all events the doctor must be patient until they get the money. But alas! the medical attendant waits in vain, even long after the enterprising collector has given up the case. Little Johnny is taken sick in due time. The doctor is sent for and will not come. The family are now righteously angry. Then the retaliatory spirit asserts itself. What might have been treasure on the earth for the expectant creditor, has been transferred to an account that can only be collected hereafter. Johnny's father feels indignant and independent. Hereafter he will do his doctor business on cash principles, and he takes Johnny to the Out-Patient Department of the New York Hospital, pays his dollar and takes his choice. His pretended poverty is counterbalanced by his respectability, and he reproaches himself for not taking advantage of such opportunities before. The only way, under the circumstances, for the doctor to get such patients back again, is to secure an appointment in the Department, and be privileged to treat them for nothing.

ESTABLISHMENTS FOR THE CURE OF OBESITY.—Professor Oertel, of Munich, inventor of the method which Schweninger had so successfully applied to the Chancellor of the Empire, has set out for different places, in order to found establishments therein for the cure of patients suffering from diseases of the heart, fatty heart, obesitas universalis, etc. Baden-Baden, Ischl, the Semmering, and Abazzia on the Adriatic, are already chosen for this purpose. As climatic stations, Meran, Bozen, Gries, and others have already been opened.

THE LACKAWANNA COUNTY MEDICAL SOCIETY held its regular monthly meeting at Scranton, Pa., on November 11th, and passed a resolution "That the County Medical Society of Lackawanna County pass a series of resolutions condemning the action of the Committee of the American Medical Association, in soliciting support for its action regarding the International Medical Congress."

News of the Week.

THE SIMS MEMORIAL FUND.—The cash subscriptions to the Sims Memorial Fund received by THE MEDICAL RECORD amount to $8,166.34, from which is deducted $406.43, for stationery, printing, postage, telegraphing, and commissions for collection. The balance, which remains on deposit with the United States Trust Company, and is subject to the order of the committee, is $7,759.91. This amount is considered sufficient to erect a suitable bronze statue to Dr. Sims, and the necessary steps to that end will be taken by the committee without further delay.

THE LANCET ON THE INTERNATIONAL MEDICAL CONGRESS.—*The Lancet*, which has for a time been inclined to take a hopeful view of the Congress, and to make somewhat light of the defection and opposition to the present management, now says: "The reign of concord is not yet within sight even of the sanguine and of those who believe that, whatever the grievances of individuals and the importance of ethical questions, the great and supreme duty of every medical man in the United States at this moment is to devise a way of peace and such a restoration of harmony in the profession as will secure the success of the International Congress in Washington in 1887. In addition to such resignations as we lately mentioned, we have Professor Henry I. Bowditch's resignation of the vice-presidency, announced in a letter to the *Boston Medical and Surgical Journal*. Dr. Bowditch complains of the tone of the 'Journal of the American Medical Association.' His resignation is the more serious as he had hitherto resisted all pressure to join in previous protests against the action taken at New Orleans and elsewhere. Another vice-presidency has been declined by Dr. Henry F. Campbell, late president of the American Medical Association; and various other resignations are reported, such as those of Dr. E. O. Shakespeare, of Philadelphia, Dr. Henry G. Beyer, Dr. John Mason, Dr. Jerome S. Kidder, and Dr. J. M. Flint, U. S. N. We record this process of resignation with great grief."

DR. FERRÁN AND HIS CHOLERA INOCULATIONS.—The *Independencia Médica*, of Barcelona, has, says *The Lancet*, for the last six months "written up" Dr. Ferrán and his cholera inoculation *usque ad nauseam*, a very considerable portion of each issue being included in the so-called *Sección Ferrániana*. In that of October 11th there is a long letter from Drs. Ferrán and Gimeno to the Ministry, recounting their inoculation successes in Ondara, Santa Pola, and Cambrils, and a lengthy article drawing attention to this and comparing Ferrán with Koch as a discoverer, pointing out that, while the German scientist was promoted from an obscure provincial appointment to a most important post in Berlin, with a subvention of 100,000 marks wherewith to carry on his researches, Ferrán has been dismissed from his charge of the Tortosa infirmary. As if this were insufficient for one number, there is an annotation headed "From Malice or Ignorance," complaining that some periodical edited by medical men had insulted "the illustrious naturalist Dr. Ferrán," by referring to "that distinguished and disinterested

practitioner" as having pocketed several thousand dollars by his inoculations. After all this, which is a sample of what has been going on in the *Independencia* regularly three times a month, there has come a sudden stop. The last number that has reached us (that of October 21st) contains no *seccion Ferràniana*, no eulogy of "our distinguished *confrère* and friend," no anathema against his ignorant, jealous, and prejudiced critics in Spain and abroad—in fact, not a word about him from one cover to the other!

Something Worth Knowing.—The genial editor of the *St. Joseph Medical Herald* informs his readers beforehand that "the next issue of the *Herald* will be a daisy."

A Suicidal mania has broken out in Berlin, and the number of persons taking their own lives has of late been rapidly on the increase. On one day last week no fewer than seven cases of suicide took place in that city.

Dr. A. N. Bell has resigned his position as sanitarian to, and membership of, the Medical Board of the New York Infant Asylum.

Suit against a Gynecologist.—The *Boston Medical and Surgical Journal* says: "We regret to note that a prominent gynecologist of Boston has been subjected to a suit for malpractice by a woman whom he treated gratuitously, the claim being made that he performed an operation upon her against her will, the operation itself being unnecessary and improper. Moreover, that she was discharged from the hospital where she had been treated, at an unsuitable time. She lays her damages against the physician at $10,000, and for a like sum against the hospital."

Dr. A. D. Rockwell on Sheridan's Ride.—In the *Magazine of American History*, for November, is a wonderfully clever account, by Dr. A. Rockwell, of the famous ride of General Sheridan. It is too seldom that the busy doctor is tempted to venture into the realm of general literature and to try his descriptive powers on something besides strictly medical cases. When he does so, he not infrequently makes his mark by infusing into his composition all those rare traits for observation which are brought out by his professional training, and by exercising his cultured judgment in sharpening the salient points of his story. Dr. Rockwell has so far succeeded in all these respects that his graphically-told story is a masterpiece in its way. We only wish was twice as long.

The Treatment of Mastitis.—Dr. Paul F. Mundé writes: "Will you kindly state in your next issue that I have nothing to do with the question of priority between Drs. Harris, Milroy, Ranney, or any one else, as to the origination of the 'Treatment of Mastitis by Rest and Compression.' I do not know who first recommended this treatment. My letter to The Record, of September last, intended merely to prove that Dr. Milroy did not derive his inspiration from Dr. Harris through me, who then happened to be Dr. Milroy's visiting surgeon at the Maternity Hospital. I think I distinctly stated that so far as I knew, the priority of the method, as between Drs. Harris and Milroy, belonged to Dr. Harris, but that Dr. Milroy *might* have hit upon it independently. I would like to be left out of this controversy in the future, as I have nothing to do with it except as above stated. I hope this will satisfy your correspondent (Dr. Julius A. Post, of Lansing, Mich.), and all others who may believe that I wish to contest their claims of priority to the method in question."

Death of Dr. William Frothingham.—The community was deeply shocked to learn of the sudden accidental death, on November 18th, of Dr. William Frothingham, of this city. It appears that while cleaning a pistol it was accidentally discharged, the ball penetrating the eye thence to the brain and killing him instantly. Dr. Frothingham had lived on Washington Heights for twenty years and had been the leading practitioner in that part of the city during this time. Dr. Frothingham was fifty-five years of age. He graduated from the College of Physicians and Surgeons in 1854. He then served three years as interne in Bellevue, and was one of a party of young physicians and surgeons who went abroad for hospital practice in Paris and in some of the cities of Germany. Dr. Frothingham served in the war as surgeon in Colonel Ellsworth's regiment. He settled in this city in 1865. He was a member of the County Medical Society, of the Academy of Medicine, of the Pathological Society, of the Physicians' Mutual Aid Association, and of the Society for the Relief of Widows and Orphans of Medical Men. He was Visiting Surgeon at the Colored Orphan Asylum and the Juvenile Asylum, and was consulting physician at the Deaf and Dumb Asylum. He was noted for his charity, not only in giving professional services, but with his money. He was a man of deep religious convictions. As a physician he was eminently successful, being one of those, apparently, who are born to the Art.

The City Charge for Ordinary Obstetrical Cases ranges from fifteen dollars for the poorer to two hundred for the richer class of patients. The tenement-house population are treated gratis by the dispensaries.

Correspondence.

THE ROMAN CATHOLIC VIEW OF CRANIOTOMY.

To the Editor of The Medical Record.

Sir: His Grace the Archbishop of New York having requested me to answer your letter to him bearing date of November 3d, I take pleasure in complying with his wish, not only out of regard for the Archbishop himself, but also because I rejoice to see this question being agitated in so commendable a spirit by the members of your profession.

Catholic theologians have always been practically agreed as to the sinfulness of the practice of craniotomy. The reason is simply that the end, however good and desirable, can never justify or excuse the use of means which are unlawful in themselves. Now, the killing of a human being, even though that being is within a few moments of death from other causes, is wrong in itself, and has all the guilt of homicide. This proposition has never been doubted by Catholics. They all admit that, even in that case, dominion over life and death belongs to God alone. Hence the killing of a human being can never be adopted as a means for obtaining any end, even one so desirable as saving the life of a mother.

Up to a few years ago this teaching was received without question by all writers on ethics within the Church. Of late years, however—moved, no doubt, by the practice prevailing among some medical men—some few theologians took up the opposite side, and began almost to maintain the lawfulness of the operation, provided an attempt had previously been made to baptize the child *in utero*. The chief writers on this side of the question were Rev. Drs. Avanzini and Penuacchi, of Rome. Their arguments may, in the main, be reduced to two:

1. The killing of the child is indirect, so far as the intention of the operator is concerned, for he looks only to the safety of the mother. Now, all moralists hold that the *indirect* killing of innocent persons may *sometimes* be lawful, as, for instance, in the case where a general advancing to the attack, places hostages in the first rank of his army. It is then lawful for the defending army to fire, though they are certain that they will thereby slay their own friends.

2. Even if the killing of the child be supposed to be *directly* contained in the intention of the operator, it is merely the slaying of an unjust aggressor. The mother has a right to her life, and the presence of the child will deprive her of that right. It is true that the child is unconscious of this fact, and is in no sense morally responsible for it; but it still remains true that it is in reality an impediment to the mother's enjoyment of her right to life; and so, just as I may, when necessary for saving my own life, kill the lunatic who attacks me, though he be not responsible for his act, so may I take the life of the child to save that of the mother.

It must be confessed that, in spite of the ability of the writers who have presented these arguments for the lawfulness of craniotomy, they would seem to be no better than trivial sophisms. With regard to the first, it is evidently false to say that a means which is *directly* adopted for attaining an end, is only *indirectly* contained in the intention of the agent who so adopts it. It is not indeed the *final* object of his intention, but it is the *immediate* and *direct* object—even more direct, if anything, than the end which is ultimately intended. The parity with the case of the hostages does not hold, for there the defenders do not kill their friends in order that from their death the destruction of the enemy may result: this would be to intend the death of the innocent in itself. They aim at the enemy, though they know that their balls will certainly strike also their friends. With regard to the death of the latter, their intention is purely *permissive*. The same cannot be said of the intention of the craniotomist. He takes the death and dismemberment of the child as a means to secure the safety of the mother. His direct intention, therefore, is, first and foremost, to kill the child.

The second argument is due to an equal confusion of ideas. To constitute an aggressor, some positive act is required. The child is in its unfortunate position through no act of its own; it has come there by the course of nature, and is, in itself, wholly passive in the matter—indeed, generally speaking, the mother might with more propriety be called the aggressor on the rights of the child.

No doubt these considerations are quite obvious and familiar to your mind; but, in order to give an outline of the state of the question among Catholics, it was necessary for me to repeat them.

After causing much discussion, the matter was carried to the Holy Office of the Inquisition, at Rome. This is one of the congregations of cardinals appointed by the Holy Father to assist him in the details of administration in the government of the Church. The particular province of this Congregation includes all matters relating immediately to faith and doctrine. The question of craniotomy remained under careful consideration by the Congregation, not for weeks or months only, but for several years. On May 25, 1883, the Cardinal-Archbishop of Lyons submitted three questions to the decision of the Holy Office. On December 10th of the same year, the Congregation replied to two of the inquiries, and added: "The third question (referring to craniotomy) having been the subject of many other inquiries, made by other bishops, is still under consideration." On May 31, 1884, was sent to the same prelate the decision which has been copied by THE MEDICAL RECORD. There is, however, a slight inaccuracy in the translation given in that journal, though the error does not affect the substance of the reply. In the original nothing is said of teaching the operation in Catholic *medical* schools. The question decided by the Congregation is stated in the letter to be this: "Whether it can be safely taught in Catholic schools that the surgical operation known as craniotomy is lawful, when, etc.," the remainder being as given in THE RECORD. The schools referred to are theological schools, as the Cardinal of Lyons had put the question with reference to his own seminary.

The authority of this decision is absolute and binding on the conscience of all Catholics. When Roman Congregations decide questions without immediate reference to the Holy Father, their authority is subject to limitations varying with the nature of the matter decided, and with other circumstances. But in important cases, especially with regard to faith and morals, their decisions are often submitted to the Pope in person, and if they receive his approbation and explicit confirmation, they become a part of the authorized teaching of the Church, and cannot be denied by any Catholic. This is the case with the present decision, as is evident from its closing paragraph.

The exact *meaning* of the technical phrase, "tuto doceri non posse," may not at first sight seem so clear. The Congregation, as you will perceive, does not in express and precise terms declare the act to be sinful. But it will be quite evident, I think, that it does this equivalently. An opinion that cannot safely be taught is certainly not a *probable* opinion. Now all Catholic theologians agree that an opinion in regard to the lawfulness of an act cannot without sin be followed in practice, unless it have at least a solid probability in its favor; and this doctrine is authoritatively confirmed by the condemnation of the contradictory proposition by Innocent XI. I therefore have no hesitation in assuring you that all Catholics are bound in conscience to admit the sinfulness of craniotomy, and that any one who performs it, unless he be excused by ignorance of the real nature of his action, incurs the guilt of homicide.

I trust that what I have said will be sufficient to enable you to treat the Catholic view of this question, as you wish, fully and intelligently. If any explanation should have been obscure or defective on any point, I shall be most happy to supply the deficiency whenever you desire.

I remain, sir, very respectfully yours,

A. SABETTI, S. J.,
Professor of Moral Theology.

WOODSTOCK COLLEGE, HOWARD COUNTY, MD.,
November 7, 1885.

SURGICAL METEOROLOGY.—The *New York Medical Journal* says that, according to Dr. B. W. Richardson ("Asclepiad"), the time is favorable for operation: (1) When the barometer is steadily rising; (2) when the barometer is steadily high; (3) when the wet-bulb thermometer shows a reading of five degrees lower than the dry-bulb; (4) when, with a high barometer and a difference of five degrees in the two thermometers, there is a mean temperature at or above 55° F. The time is unfavorable for operation: (1) When the barometer is steadily falling; (2) when the barometer is steadily low; (3) when the wet bulb thermometer approaches the dry-bulb within two or three degrees; (4) when, with a low barometrical pressure and approach to unity of reading of the two thermometers, there is a mean temperature above 45° and under 55° F.

Reports of Societies.

MEDICAL SOCIETY OF THE COUNTY OF NEW YORK.

Adjourned Annual and Stated Meetings, November 23, 1885.

DANIEL LEWIS, M.D., PRESIDENT IN THE CHAIR.

LIABILITY FOR DAMAGES FOR REPORTING CASES OF CONTAGIOUS DISEASE.

THE *Comitia Minora* recommended that the Society request Drs. A. E. M. and A. S. Purdy, defendants in the case of Brown *vs.* Purdy, to appeal, the jury having brought in a verdict of five hundred dollars damages, and also that the sum of five hundred dollars, if necessary, be appropriated to aid in the proceedings.

The defendants reported what they believed to be a case of varioloid. The Health Board sent an inspector who saw the patient, and the Board ordered a removal to the Riverside (small-pox) Hospital. The plaintiff remained in the hospital a short time and was discharged, and subsequently brought suit for damages against the defendants, with the plea that she did not have varioloid.

On motion by DR. AGNEW the recommendation was received, and recommitted to the Comitia, with the authority of the Society to act in the premises.

The adjourned Annual Meeting then adjourned, and the Stated Meeting was called to order.

INAUGURAL ADDRESS.

THE PRESIDENT, DR. DANIEL LEWIS, delivered his inaugural address. To-day the Society began its eighty-first year. Organized before the days of Governor Clinton, upon a platform broad enough to embrace all that is desirable in the realm of medical science, professional advancement, and the public weal, it has steadily increased in numbers and influence till the present time.

It is to be expected, in fact is unavoidable, that vast changes occurring in society since 1805 should have affected the character of the medical profession favorably or otherwise. The profession of medicine, like other so-called learned professions, has its commercial side, whereby society contributes to its support for services rendered. In just the proportion in which the physician places the science and art of medicine first, and the question of dollars and cents afterward, is the practice of medicine

A PROFESSION OR A TRADE.

The President then directed attention to what seemed to be tendencies in our times to degrade the profession to a trade level. While "Listerine" and scores of other less pretentious quack preparations might be excellent, and certain brands of wines might be delicious, yet no professional man could afford to place himself in a position where a monetary consideration might be suspected. The indorsement of any proprietary remedy was certain to react unfavorably upon the legitimate practice of medicine. Our materia medica is extreme enough, and our therapeutics sufficiently perfected to enable any intelligent physician to prepare his own prescriptions, and avoid any possible recognition of the patent-medicine men who infest every community.

Numerous places for receiving patients are now tolerated which were not in vogue within the recollection of even the younger members of the Society. Men have been expelled from our ranks for having advertised private medical institutions for the treatment of diseases by the Swedish-movement cure, medical baths, and the like, whereas it now happens that infirmaries, sanitariums, homes for inebriates, etc., are described in the daily papers as being organized and conducted by the eminent Dr. Blank with a corps of competent assistants.

There is just ground for suspicion that an operation may have been undertaken either for the purpose of teaching the apprentice his trade or increasing a master workman's wages.

Removal of the ovaries may be useful, but if it proves to be popular, is there a probability of its being so extended or modified as to apply to diseased conditions not yet thought of in that connection, perhaps in both sexes?

There can be but one cause for this unseemly strife for medical business, and that is the overcrowded condition of our ranks, and the remedy lies in raising the standard of requirement for admission to practice. On a former occasion he had expressed to the Society the conviction that a

STATE EXAMINATION

was one of the most potent means within reach for securing these objects. That is the opinion of a very large majority of the best medical men of our land to-day, and it would hardly seem necessary to discuss the question but for the fact that the superintendent of a lunatic asylum, who was also president of the New York State Medical Association, had publicly declared that the best interests of all concerned were subserved by the present methods of admission to practice.

The President then urged State examinations and a higher standard for admission and graduation from medical schools.

In closing, he expressed his appreciation of the obligations imposed by his unanimous re-election, an honor which he had no right to expect, but for which he was none the less grateful.

At the close of his address the President announced the following

COMMITTEES FOR THE ENSUING YEAR:

Committee on Hygiene—Dr. E. H. Janes, Chairman; Drs. Alexander Hadden, Cyrus Edson, John C. Peters, and W. L. Hardy.

Committee on Ethics—Dr. George A. Peters, Chairman; Drs. M. Blumenthal, C. C. Lee, W. T. Alexander, and E. Waitzfelder.

Committee on Prize Essays—Dr. F. R. Sturgis, Chairman; Drs. F. P. Foster and W. R. Birdsall.

Auditing Committee—Dr. P. A. Morrow, Chairman, and Dr. Gorham Bacon.

DR. NORMAN KINGSLEY presented a patient with

CLEFT SOFT PALATE,

tested his ability to articulate, so that the members could hear for themselves, and proposed to exhibit the patient at some future meeting, after he had been under treatment.

DR. MILTON JOSIAH ROBERTS then read a paper on

THE MECHANICAL AND OPERATIVE TREATMENT OF KNOCK-KNEE AND BOW-LEG,

in which he described methods of examination, new forms of apparatus, and new operations, etc. He objects strenuously to the use of subcutaneous saws, and to chisels for dividing the bone, and recommends the electro-osteotome, an elaborate instrument of his own device.

Dr. Roberts illustrated the operation of this instrument, and also exhibited another, designed for determining the width of the base of the wedge to be removed from a crooked bone, in order to make it straight, and called the gonometric bone-gauge.

THE PRESIDENT announced the death of Drs. E. B. Warner and William Frothingham.

THE SECRETARY read a communication received from the Board of Health announcing that the

WILLARD PARKER HOSPITAL,

at the foot of East Sixteenth Street, is open for the treatment of cases of such contagious diseases as scarlatina, measles, and diphtheria.

The Society then adjourned.

NEW YORK STATE MEDICAL ASSOCIATION.

Second Annual Meeting, held in New York, November 17, 18, 19 and 20, 1885.

(Continued from page 580.)

THURSDAY, NOVEMBER 19TH—THIRD DAY—MORNING SESSION.

THE Corresponding Secretary announced that 220 members had registered up to the present time. The Nominating Committee reported the following nominations of

OFFICERS FOR 1885–86.

President—Dr. E. M. Moore, of Monroe County, Fourth District.

Vice-Presidents—First District: Dr. William Gillis, of Franklin County; Second District: Dr. H. C. Van Zandt, of Schenectady County; Third District: Dr. F. Hyde, of Cortland County; Fifth District: Dr. D. Guernsey, of Dutchess County.

Recording Secretary—Dr. Caleb Green, of Cortland County.

Corresponding Secretary—Dr. E. D. Ferguson, of Troy.

Treasurer—Dr. John H. Hinton, of New York.

Members of the Council—At Large, Dr. John Shrady, of New York; First District, Drs. E. M. Lyon and Ira H. Abell; Second District, Drs. R. C. McEwen and Thomas Wilson; Third District, Drs. F. Hyde and F. W. Ross; Fourth District, Drs. Darwin Colvin and S. T. Clark; Fifth District, Drs. J. W. S. Gouley and E. S. F. Arnold.

The report of the committee was accepted, and the above-named officers were elected unanimously.

THE REPORT OF THE LIBRARY COMMITTEE

was then read. It was stated that about 3,500 volumes and 4,000 pamphlets had been received.

Dr. FELL, of Erie County, read a paper entitled

SOME ETIOLOGICAL FACTORS IN THE ACNEFORM DISEASES.

The author differed from most authorities as to the value of the *acarus*, or *demodex folliculorum*, as a pathogenetic factor of some, at least, of the acneform diseases. He thought that their almost constant presence in the pustules and in the free pus was a fact of considerable importance, although he was not prepared as yet to assert that they were the real and sole cause. They were found free in the pus and not in the sebaceous matter only. He then gave the results of a number of microscopical examinations of the contents of the pustules in a case of acne, in which he found the parasites almost invariably present. His treatment, which had been very successful, was directed to the destruction of the demodex.

Dr. E. G. JANEWAY, of New York County, then read the

ADDRESS ON PATHOLOGY.

We are witnessing now, the author said, a pathological revolution, and the strides made in the study of bacterial pathology are great. There are yet, however, many problems awaiting solution, one of the most important of which is that of the *de novo* origin of infectious diseases. Have the specific germs of typhus and typhoid fever a habitat outside of the body? The speaker thought it was possible that, as regards the latter disease, the germ might so live and propagate itself. He insisted upon the necessity of the careful observation and study of diseases arising, apparently *de novo*, in isolated places. Another important question is that of the prevention or mitigation of disease by inoculation with attenuated virus. While on this question, the speaker said that his experience had been that vaccination three days after exposure to small-pox would not prevent an attack of the latter disease; vaccination was delayed and the patient had an attack of small-pox, though a mild one. He explained that the Germans were ahead of other nationalities in the matter of pathological investigations, largely because of the liberality of their government in fostering scientific studies. Young men were stimulated to work in the hope of obtaining the honors of a professorship. Young men in this country were deterred often from undertaking practical scientific studies by the great cost of the necessary apparatus, which was double that of the same instruments in Germany.

At the request of several members Dr. Janeway made also some remarks on the use of

OXYGEN GAS IN PNEUMONIA.

He said it was of great value if given at the very commencement of cyanosis, but if begun later, after cyanosis was fully established, it was less useful. It should be repeated as often as the blueness of the skin reappeared.

AFTERNOON SESSION.

DR. WILLIAM W. SEYMOUR, of Rensselaer County, read the first paper, entitled

A CASE OF GALLSTONES, PATENT AND CONCEALED—EXPLORATORY LAPAROTOMY—AUTOPSY EIGHT WEEKS LATER.

His conclusions were that the operation of incision of the gall-bladder was justifiable in suitable cases, and preferable to excision.

DR. NELSON L. NORTH, of Kings County, then presented a paper on the

THERAPY OF THE CHLORIDES; ANTISEPSIS A PROMINENT AND IMPORTANT FACTOR IN THEIR MEDICINAL ACTION.

He regarded disease as a result of changed physiological processes, and due to the presence of disease germs; and if this be so, antisepsis is the key to the treatment of infectious disease. The efficacy of the mercurial chlorides in syphilis, dysentery, gonorrhœa, and other affections, rests in their power of destroying micro-organisms. It is probable that the action of the chloride of iron in Bright's disease will be eventually explained in the same way. The benefit of muriate of ammonia is doubtless due to its antiseptic action. In diphtheria, he said, the first thing should be to destroy the cause by tincture of iron and chlorate of potassium, and after this, if necessary, brandy and nourishing food may be given.

DR. PETERS, of Albany County, said that he had never lost a case of diphtheria since he began to give the bichloride of mercury, one-thirtieth grain, alternating with tincture of iron every hour.

DR. ROBERT NEWMAN, of New York County, followed with a paper entitled the

CAUSES OF FAILURE IN THE TREATMENT OF URETHRAL STRICTURE BY ELECTROLYSIS.

He said his success had been so great in his own cases that he was astonished when he heard that others had failed in this method of treatment. He was led to investigate the causes of these failures, and had come to the conclusion that these were three: 1. Incompetence of the operator; he should be not only a good surgeon, but a good electrician. 2. Incorrect diagnosis; electrolysis will not cure spasms of the urethra or enlarged prostate. 3. Faulty instruments; electrolysis properly handled cannot fail.

DR. G. H. MEIER, of New York County, regarded the operation as one of great value, and destined to win a place for itself in the therapy of urethral stricture.

DR. T. H. MANLEY, of New York County, thought

the operation was not one that could be undertaken by every one, as the author had said it required an expert in electricity to perform it successfully, and he thought it was a dangerous matter to recommend its general adoption by the profession at large.

Dr. W. W. Seymour, of Rensselaer County, read a paper on

THE DIAGNOSIS AND TREATMENT OF PELVIC HÆMATOCELE.

This affection occurs during the period of menstrual life, and is as common in nulliparæ as in those who have borne children. The author detailed the causes and mode of origin of hæmatocele, and the symptoms of this condition. A certain diagnosis is impossible before the expiration of several hours. The indications for treatment are to control hemorrhage and diminish shock. If there seem to be no tendency of the effusion to increase, rest is all that is necessary; but if it do increase and press upon the neighboring organs, aspiration of the uncoagulated portion is often beneficial; when suppuration has occurred, free opening is necessary; this should be done through the vagina or the abdomen, but never through the rectum.

The following papers were read by title: "A Case of Poisoning by Two Grains of Strychnia—Treatment, Chloral Hydrate and Coffee," by Dr. Wm. Fitch, of Tompkins County; "The Treatment of Abscess," by Dr. J. D. Rushmore, of Kings County; "Chronic Catarrhal Gastritis: Fatal from Complication of Sudden Enlargement of the Thyroid Gland," by Wm. H. Thayer, of Kings County; "The Proper Disposition of Street Sweepings, Ashes, Swill, and Garbage in our Cities," by Dr. Albert H. Briggs, of Erie County; "Ergot—Its Uses and Misuses," by Dr. J. K. Leaning, of Otsego County; and "Nutrition in Lithæmia," by Dr. Charles G. Stockton, of Erie County.

The session was then adjourned to meet in the morning at the Carnegie Laboratory, on East Twenty-Sixth Street.

Friday, November 20th—Fourth Day—Morning Session.

The meeting was called to order in the Carnegie Laboratory, at 10 o'clock, by Dr. Wm. Gillis, of Franklin County.

Dr. Samuel W. Smith, of New York County, read a paper entitled,

THE HISTORY AND TREATMENT OF THIRTY CASES OF DIPHTHERIA.

These cases were treated according to the method advocated by Dr. Billington. This consists of the internal administration, alternately, of tincture of the chloride of iron in glycerine, and chlorate of potassium; of thorough irrigation of the affected parts of the pharynx and nares with a solution of common salt, to which Dr. Smith adds borax; and of spraying the fauces with lime-water and carbolic acid. Of these thirty cases there were five deaths. The author was not attached to tracheotomy in laryngeal diphtheria. He was not a dualist, but inclined to the belief of the identity of membranous croup and laryngeal diphtheria. He thought that those who claimed to cure every case of diphtheria were not to be relied upon, but dealt rather with fiction than fact. Dr. Smith had given no alcohol or quinine in these cases, but kept his patients upon a strict milk diet.

Dr. Hannan, of Sullivan County, did not think much of the paper, and said no one in New York City, professor or otherwise, knew anything about diphtheria any way.

Further discussion was participated in by Drs. Garrish, Kneeland, Fell, and others.

THE REPORT OF THE COUNCIL

was then read, in which it was announced that the next meeting of the Association would be held in New York City, in November, 1886.

Dr. George T. Harrison, of New York County, followed with a paper on

PERI-UTERINE HÆMATOMA,

in which he described the principal symptoms, and dwelt upon the differential diagnosis.

Dr. John Shrady, of New York County, reported a case of

CANCER OF THE KIDNEY,

occurring in a young child. Malignant disease of this organ, the speaker said, is found relatively often in children under five years of age. The diagnosis of the affection, in infants and young children, is comparatively simple since malignant disease of the ovaries or spleen may be excluded. The idea that carcinoma is exclusively a disease of advanced life is erroneous. A point of value in the diagnosis is the position of the colon lying in front of the tumor; another is the astonishingly rapid increase in the size of the new growth. The other organs are displaced, and the pressure upon the lungs causes sometimes intense dyspnœa. Hematuria is supposed to be a pathognomonic symptom, but the author had not observed it in three cases which he had seen. One striking appearance was the prominent and somewhat varicose condition of the superficial abdominal veins. The pain may be severe and constant, or it may be intermittent.

Dr. Fell, of Erie County, extended an invitation to the members to be present at the next meeting of the

AMERICAN MICROSCOPICAL SOCIETY,

to be held at Chautauqua, in August, 1886.

The Committee of Arrangements announced that at the next meeting, in 1866, sessions would be held for three days only, and most of the scientific work would be confined to the morning and afternoon, leaving the members more at liberty to seek recreation in the evening.

The following papers were read by title: "The Modern Aspect of Therapeutics," by Dr. Thomas H. Manley, of New York County; "The Vectis in Cross-births," and "Pessaries and their Uses," by Dr. Jacob Hartmann, of New York County; "Notes on Contracture of the Bladder Consequent upon Cystitis," by Dr. J. W. S. Gouley, of New York County.

Afternoon Session.

This session was devoted to a

DEMONSTRATION OF THE PLASTER-OF-PARIS JACKET

in its application to the treatment of spondylitis and lateral curvature, by Dr. Lewis A. Sayre, of New York County.

The Session was then adjourned until evening.

Evening Session.

Dr. Frederic S. Dennis read a paper on

THE ACTION OF MICRO-ORGANISMS UPON SURGICAL WOUNDS, WITH DEMONSTRATIONS.

The following classification of micro-organisms was given: 1. Spherobacteria, or bacteria in spheres. 2 Microbacteria, or bacteria in rods. 3. Desmobacteria, or bacteria in straight filaments. 4. Spirobacteria, or bacteria in spiral filaments. 5. Fungi. Nos. 1, 2, 3, and 4 belong to Schizomycetes. To 5, belong Blastomycetes.

Later in the evening, the annual banquet of the Association was served at the Murray Hill Hotel. Dr. John P. Gray, the retiring president, acted as toast-master. The first toast, "The growth of our Association," was responded to by Dr. H. D. Didama. "Our District Associations" was responded to by Dr. Frederick Hyde. To "Our Future" response was made by Dr. E. M. Moore. "The Press" was represented by Mr. McElroy, of the *Brooklyn Times*, and Dr. Simeon Tucker Clark read a poem entitled "Life and Death."

NEW YORK ACADEMY OF MEDICINE.

Anniversary Meeting, November 19, 1885.

ABRAHAM JACOBI, M.D., PRESIDENT, IN THE CHAIR.

A SECTION on Laryngology and Rhinology was created.

THE BOARD OF HEALTH.

A letter from James Gallatin, Esq, addressed to the President, was read, in which the writer directed attention to certain facts in connection with the action of the Board of Estimate and Apportionment which might impair the usefulness of the Board of Health by reduction of salaries and dismissal of valuable medical members. Some reduction could be borne without inconvenience. The letter urged upon the Academy the propriety of expressing the desire that the old and tried medical members of the Board be retained.

On motion the letter was accepted.¶

DR. GOUVERNEUR M. SMITH offered the following preamble and resolution, and moved their adoption.

Whereas, It is a generally recognized fact that the value of the work of the Health Department of the City of New York depends largely on the presence and training of competent medical men; and

Whereas, It has been declared expedient that some reduction in expense should be made during the coming year; be it therefore

Resolved, That it is the sense of the New York Academy of Medicine that said reduction should be effected in such a way as not to impair the usefulness of the department, either by dismissal of competent and experienced physicians now years in the service, or by lowering their salaries below a fair and equitable rate.

With regard to the wisdom of reducing the appropriation for the use of the Health Department he had noth to say; but concerning the medical element of the department the profession certainly had the right to give an expression of opinion.

DR. FORDYCE BARKER seconded the resolution, and said that how far expenditures had been injudicious, and how far appropriations might be diminished, he was utterly unable to say; but as regards the resolution there was no doubt that, to secure efficient work, men fully competent to discharge the duties of the offices must be employed, and of such integrity that they were worthy of being employed and amply paid for their services.

The resolution was unanimously adopted.

DR. HENRY D. NOYES then delivered the Anniversary Discourse (see MEDICAL RECORD, page 589), on

PATHFINDING IN MEDICINE.

DR. FORDYCE BARKER, at the close of the address, gave a brief and entertaining review of the history of the custom of having an anniversary discourse delivered before the Academy, and made pleasant reference to those by the late Dr. Francis in 1847, and by the late Dr. J. Marion Sims in 1857, who included in his oration the history of the silver suture. While Dr. Sims was speaking, one of the ladies sitting by the side of Dr. Barker asked "What is this silver suture?" to which Dr. Barker replied that it was "a new-fashioned back-stitch." Dr. Barker also referred to the reference made by Dr. Noyes to the practicability and desirability of making the Academy the great centre of advanced study in medicine, and also spoke of it as one toward which the profession, not only of the United States, but of the world, might turn with the assurance that their desires and hopes would be fully realized.

He moved that the thanks of the Academy be tendered to the orator for his suggestive, interesting, and able address. Unanimously carried.

The Academy then adjourned.

SECTION IN PRACTICE.

Stated Meeting, November 19, 1885.

ALFRED L. LOOMIS, M.D., LL.D., CHAIRMAN.

DR. R. C. M. PAGE read a paper (see MEDICAL RECORD, November 21st)

ON BRIGHT'S DISEASE.

DR. FRANCIS DELAFIELD opened the discussion, and said that Dr. Page's paper brought before us a subject which, although it had been gone over so many times by so many different writers, always remained one of interest. The different forms of Bright's disease of the kidneys constituted some of the commonest diseases of civilized life. Every day we were brought face to face with them and were made to feel more and more how little we really knew concerning them. There was, perhaps, no set of lesions or of symptoms which had occupied the attention of so many of the best minds in the profession, and yet we were obliged to acknowledge that we could not fully understand them, nor did we know fully how to treat them.

It had always seemed to him that the first step toward improvement in our knowledge of kidney diseases lay in an accurate classification, and although one after another had made an attempt to do this, he thought it must be acknowledged that no one had yet made a classification that was acceptable to all. The sort of classification that one needed would depend partly on the particular way in which one was brought in contact with these affections. For clinical purposes the simple division into acute and chronic Bright's disease, and the further subdivision of chronic Bright's disease into the cases in which the kidneys were atrophied, and those in which atrophy was not present, certainly answered a reasonably fair purpose; it was a practical division, and one which corresponded fairly well with ordinary clinical experience.

But if we went a little further than this, and looked at the kidneys of persons who had died of either acute or chronic Bright's disease, then it would be found that all kidneys were not the same. Again, when we endeavored to put together the clinical symptoms in a number of cases and make them correspond to the varieties of exact anatomical changes, it would be found that our success would be somewhat limited.

Take, for example, what might be included under acute Bright's disease. Anatomically the acute affection included two different lesions: one in which the inflammatory changes were confined to the epithelium of the tubules and of the Malpighian body; this form might be called *tubular nephritis*, or *parenchymatous nephritis*, and anatomically the lesion was distinct enough. On the other hand, there were examples of acute Bright's disease in which, in addition to the changes in the epithelium of the tubules and of the Malpighian bodies, there were changes in the stroma, consisting in an infiltration of the stroma with serum and white blood-corpuscles. In these cases also it would be found that the change in the epithelium of the Malpighian bodies was very much more marked than it was in the first set of cases; this second set of cases might be called *acute diffuse nephritis*, and we might separate the special ones in which changes in the epithelial cells of the Malpighian bodies were most marked and call those *glomerulo-nephritis*.

These three different conditions constituted a very great majority of all the cases of acute Bright's disease. There were a very few cases, however, in which the lesion was almost entirely interstitial, and in which there was scarcely any change in the epithelium of the tubes, and but very little change in the Malpighian bodies; this, anatomically, had been called *acute interstitial nephritis*, but these cases were very rare.

But when we studied the cases of acute parenchyma-

tous, or acute tubular, acute diffuse, and acute glomerulo-nephritis, it would be found, after all, that their clinical histories were very much the same. There were many cases which it would be entirely impossible to distinguish during the life of the patient. Generally speaking, the cases of parenchymatous nephritis were less severe, and those of acute diffuse and glomerulo-nephritis were more severe; yet cases of parenchymatous nephritis which were quite as severe as those of acute diffuse nephritis were occasionally seen, and therefore, for clinical purposes, this anatomical division did not help us very much.

If a patient had acute Bright's disease, it was readily enough recognized during life; but we were not, as a rule, able to make a differential diagnosis between an acute nephritis which involved only the tubes and an acute nephritis which involved both the tubes and the stroma of the kidney. The comparatively rare cases of pure interstitial nephritis were so few that we could not speak of them with any certainty. He had found but few recorded by other observers, and had seen but few cases himself. Their clinical history was somewhat different from that of other cases of acute Bright's disease, yet he had not seen enough of this form of the affection to fully warrant him in trying to give an outline of the clinical picture.

When we came to the cases of the chronic affection, it was found that the general name, chronic Bright's disease, answered a very good clinical purpose. It covered a large number of cases of renal disease in which the symptoms were essentially the same, varying in degree of development in different individuals. The fact that in some of the cases the kidneys became atrophied, with very marked changes in the interstitial tissue, had very properly led to the separation of these kidneys from other forms of Bright's disease as a particular variety, and the *atrophic form of the affection* was well known. The clinical course of this form of chronic Bright's disease was apt to be long-continued, the early symptoms were often obscure, and there was a disproportion in many cases between the amount of kidney lesion and the symptoms during the life of the patient. Yet the kidney lesions remained, and the patient was capable of getting better, and then worse. The symptoms extended over a long period of time, the body had time to get accustomed to the gradual change in the kidneys, and finally, we may find kidneys which weigh not more than three or four ounces without having given rise to any renal symptom whatever.

Then, apart from these atrophic kidneys, there were a very considerable number of other cases of chronic Bright's disease which we were apt to group together rather loosely under the name of the *large white kidney*. These, again, had their own characteristic course, which was more acute and more likely to be attended by dropsy and acute symptoms of different kinds. Again, when we examined the kidneys more closely, we would find, in some of the cases of chronic Bright's disease, that the lesions were confined to the tubes and to the epithelial cells of the Malpighian bodies, and these cases might be called *tubular or parenchymatous nephritis*. Then we had the so-called atrophied kidneys, and with these were anatomically to be grouped a number of kidneys which were not atrophied at all. In these cases changes would be found in both the epithelium of the tubes and the Malpighian bodies, and also in the stroma and in the arteries. It has become rather customary to call this form of the disease by the name of interstitial nephritis, on account of the great development of changes in the stroma. There would be no special objection to this name, in many points of view, if it were not that besides these kidneys there were those which were examples of real *interstitial nephritis*, in which the changes existed in the stroma alone, without changes in the epithelium of the tubes or in the Malpighian bodies. These cases, however, were of comparatively rare occurrence, but were sufficiently numerous to make it more convenient to classify these atrophied kidneys under the common name of *chronic diffuse nephritis*.

Another point to which Dr. Page had called attention was that particular group of symptoms belonging to kidney diseases, and commonly called *uræmia*. All were familiar with this group, consisting of cerebral symptoms—headache, restlessness, sleeplessness, delirium, stupor, convulsions, and coma—repeated and uncontrollable vomiting, and dyspnœa, apt to be excessive. These three—cerebral symptoms, vomiting, and dyspnœa—sometimes the one, sometimes the other, being most marked, belong regularly to a uræmic attack.

This group of symptoms appears as an acute condition which seems to demand medical interference, has attracted, and always will attract, attention, and our treatment always seems to be influenced to a considerable degree by our special views as to what the cause of these uræmic attacks may be.

Of course, it would be out of place at the present time to attempt any prolonged discussion as to what the real cause of uræmia may be. Most observers, however, had come to a choice of one of these conditions: either that the attacks are due to anæmia and œdema of the brain and its membranes, or that they are due to the circulation of urea or some other excrementitious substance in the blood, or that they are due simply to disturbances of the circulation.

The idea that uræmic attacks are due to poisoning of the blood by urea or other excrementitious substance is one which has taken a very firm hold upon the profession, and one which is felt in every-day practice. When a patient has been found in the uræmic condition, purging, sweating, and the use of diuretics have been, and still is, a routine treatment. Most of us have applied this routine treatment, and may yet use it, although we may not think very highly of it. All must have felt that, although it is the routine treatment, it is one which but seldom has any favorable effect on the patient.

Within a moderate number of years the drift of practice has been rather to break away from this routine, and to use remedies belonging to a different class, remedies which really act upon the circulation of the blood, and the good effect of which seems rather to indicate that these uræmic attacks are not due to any blood-poisoning, but are simply due to an abnormal distribution of the blood throughout the body; and the abnormal distribution seems to consist in that the brain, the lungs, the stomach, the kidneys, perhaps the liver, contain too small quantity of arterial and too large quantity of venous blood.

The plans of treatment which have been brought forward in later years, whether adopted by those who hold that the symptoms are due to disturbances of the circulation or not, do seem to point in that direction—for example, the use of opium. All of us have learned to look upon opium in the treatment of both acute uræmia and the more prolonged uræmic conditions as our great reliance. We have also learned that the more severe the uræmic attack, so much the larger doses of opium can be used, and that to do the most good we should administer it in the most sudden way, and that is by large hypodermic injections.

In other words, we use a drug that strengthens the force of the heart's action and relaxes any contraction of small arteries and capillaries which may exist.

In the same way we use the chloral hydrate, which is certainly very efficacious in the treatment of uræmic attacks, and it acts apparently by dilating the small arteries and capillaries.

In uræmic attacks in which the heart is found to be acting feebly, it is best to resort to those remedies which stimulate the heart's action.

In the uræmic attacks in which the heart's action, during the attack, is found too forcible, the best results are obtained with drugs which reduce its force.

The uræmic attacks which resemble angina pectoris,

being attended by spasmodic contraction of the small arteries, are best relieved by inhalations of nitrite of amyl and the administration of nitro glycerine.

It seems, therefore, that in the treatment of the acute and of the more chronic uræmic attacks we are learning more and more to place confidence in the drugs which do not eliminate a poison from the body, but which simply act upon the heart and upon the arteries.

Dr. William H. Draper said he was not prepared to discuss the comprehensive paper of Dr. Page in the ten minutes allotted, and would therefore confine his remarks to the method of treatment of the uræmic attacks.

His own experience had brought him to the same conclusion which had been expressed so well by Dr. Delafield. He confessed, however, that he was perhaps more or less under the dominion, in cases of the more acute cerebro-spinal symptoms ascribed to uræmia, of the eliminative treatment.

At the same time he was prepared to admit that his views with regard to the manner in which so-called eliminative remedies act was not, perhaps, by the elimination of any poison from the body so much as by their action upon the circulation. He thought that we might arrive by blood-letting, by brisk purgation, and by active diaphoresis, at the same results, so far as the circulation was concerned, which were obtained by the administration of opium, glonoin, and nitrite of amyl.

When, however, he was brought into contact with a case of uræmic convulsions, he was prone to adopt either blood-letting or brisk purgation in connection with opium. He thought that was the point which Dr. Page wished to make when recommending the pilocarpin with opium. Dr. Draper had not for some years used pilocarpin in cases of uræmia, partly because he had not had very marked success with the remedy, and partly because he had felt that it was a dangerous cardiac depressant. He had been more given to the use of brisk purgation and blood-letting; his experience with blood-letting had been chiefly in cases of puerperal convulsions.

In the treatment of the less alarming uræmic symptoms—the uræmic headache, dyspnœa, and vomiting—he had felt for a long time that opium was the sheet-anchor. He had not, thus far, had the success with nitro-glycerine that he had obtained with opium. He knew of nothing which relieved uræmic dyspnœa so well as a hypodermic injection of morphine, and it was equally efficacious in the relief of uræmic headache.

Uræmic vomiting he looked upon as one of the most rebellious and troublesome of all uræmic phenomena, and while opium sometimes did give relief, he thought that it did not act with the same energy as in the other cases.

Dr. Heineman asked a question with reference to uræmia. Some patients, suffering from chronic Bright's disease, pass two or three times the normal quantity of urine, and while the proportion of urea is diminished, the total quantity daily is in excess of the normal. How is uræmia to be accounted for in those cases if it depend simply upon the presence of urea in the blood?

The Chairman said that if he were to answer the question he should say that in chronic uræmia patients become accustomed to the influence of the poison, if urea acted directly as a poison, and while at one given examination in twenty-four hours a patient might pass more than the normal quantity of urea, if the urine for a week or a month were examined it would be found that the quantity of urea excreted was less than normal. His impression was, that if urea acted at all, its effects were upon the circulatory system, and in the way of changes in the arterioles and capillaries, and not as a direct poison upon the nervous centres, and that the uræmic symptoms in chronic Bright's disease are the results of these changes affecting the blood-vessels.

Dr. Heineman said that his examinations were not single, but extended over a long period of time. He brought the fact forward simply as evidence that the term uræmia did not at all times apply; that it was not urea only which was retained in the blood, but that there were other elements which produced the symptoms called uræmic.

Dr. Page, in closing the discussion, said he had hoped that one point referred to in his paper would have been discussed, namely, the influence which chronic Bright's disease exerted on the safety in administering ether and chloroform as anæsthetics, and therefore on their inhalation for the purpose of controlling uræmic convulsions or relieving other uræmic symptoms.

"About fourteen years ago, in my private hospital, I closed the lacerated perineum of a woman who seemed otherwise in excellent health. Ether was administered, but she never entirely regained her consciousness, and died with well-marked symptoms of uræmic poisoning, about thirty-two hours after the operation. It was found that she had Bright's disease of the kidneys. Since then I have had at least five deaths to occur in public and private practice, and these, perhaps, might not have occurred had the importance of examining the urine been appreciated before the anæsthetic was given. I established the rule, when in charge of the Woman's Hospital, that the urine should be examined in every case before an anæsthetic was administered. The result was that in a number of instances unsuspected disease of the kidneys was detected, and the operation was performed with the aid of opium, and without an anæsthetic" (Emmet's "Principles and Practice of Gynecology," p. 730. First edition. 1879).

In a case of twin pregnancy occurring three years ago, in a young primipara, twenty-one years of age, and attended by me, dropsy was well marked, and she had albuminuria. As labor progressed slowly, and fearing that she might have convulsions, I at once called Dr. George T. Harrison in consultation. We agreed that she should be delivered with forceps without further delay. Ether was administered, and she was speedily delivered. There was no more hemorrhage than is usual in a normal case of labor. The patient, however, went into a profound state of collapse, out of which I had the utmost difficulty in bringing her by means of hypodermic injections of morphine and hot bottles placed about her extremities. Dr. E. D. Hudson, Jr., also saw this case with me afterward.

The topic of general discussion was,

IS CROUPOUS PNEUMONIA AN INFLAMMATION OR A FEVER?

The discussion was opened by Dr. William H. Draper, who said: "I feel as if I ought to apologize for consenting to open the discussion on this subject, for the reason that I have no settled convictions to offer in regard to the question as to whether croupous pneumonia is simply a local inflammation or the lesion of an essential, specific fever.

"In approaching the question, it is important to remember that all that we positively know about the nature of pneumonia is that it is anatomically an inflammation of the air-vesicles and bronchioles. When we go beyond this fact, and attempt to determine its cause, we leave the confines of positive knowledge and enter the illimitable realm of conjecture, or the more or less obscure nebula which surrounds the body of exact science and is yet unincorporated.

"The question before us is one which has occupied the minds of pathologists and clinical observers for many years. In a discussion which took place in this Academy, in 1865, I read a paper in which, with somewhat more zeal than I could command now, I advocated the theory of the essential nature of the fever in pneumonia. In 1881 an excellent paper was read by Dr. Sanders, of this city, on the same subject, advocating a similar view; and in the discussion which followed, if I remember rightly, several observers, among them Drs. Flint and Loomis, lent the weight of their authority to the theory that the

lesion of pneumonia bears the same relation to the fever that is borne by the lesions of the exanthemata to the fever which is their essential characteristic. The arguments in favor of this theory are familiar to you all. They are simply, the occasional epidemic prevalence of the disease; the independence, in the majority of cases, of the exciting causes of cold and dampness; the precedence of the fever to the lesion, sometimes by a period of one or two days; the occurrence, especially in young subjects, of more or less violent cerebro-spinal symptoms; the frequent association with the disease of nephritis; and the fact, which has always especially attracted my attention, that the beginning of defervescence is nearly, if not exactly, coincident with the maximum of extent and intensity of the local lesion. But interesting, and at first sight striking, as these arguments appear, if we examine them, we shall see that some of them will scarcely bear critical analysis, and that all of them are open to more or less objection, as proving that pneumonia is always a septic fever. The occasional epidemic occurrence of pneumonia may prove that it is an infection fever, but it could scarcely be held to prove anything more. The independence of many of the sporadic cases of the exciting causes of cold and dampness is certainly a striking fact; but the fact that the lesion occurs suddenly in acute alcoholism and after immersion, as well as after severe exposures to cold, is also striking; and goes far to prove that the disease may sometimes recognize a nervous origin.

"The precedence of the fever in the sequence of events in pneumonia is not inconsistent with the theory that the pyrexia is due to the inflammatory process in the lung. It is quite possible that it is coincident with changes which are not recognizable by physical exploration.

"The occurrence, especially in young subjects, of more or less violent cerebro-spinal symptoms is quite as explicable on the theory of reflex disorder as on that of direct irritation.

"The frequent association of nephritis with pneumonia is certainly suggestive of a common cause, and yet it is not unlikely that the nephritis is the result of changes in blood-pressure brought about by the pulmonary disease.

"The coincidence of defervescence with the culmination of the local lesion, as I stated, impresses me as the most striking proof of the analogy which exists between pneumonia and typhus and erysipelas, and yet here again we must not fail to observe that the critical termination of pneumonia is not the only termination. Some cases terminate by lysis. Still, the rule of sudden defervescence has no more exceptions, perhaps, than occur in typhus and erysipelas

"I think we must conclude, therefore, that arguments drawn from the clinical history of the disease are insufficient to determine the question as to the essential character of pneumonia—as to whether it is primarily a pyrexia of septic origin, or a local inflammation, a tissue disorder determined by a variety of causes which act primarily upon the nervous system.

"The recent revelations of bacterial pathology lend a new interest to this inquiry, and very properly suggest a reconsideration of the origin of the inflammatory lesion in pneumonia. We shall find, however, if we trace the history of the monas pulmonale from its discovery in 1877 by Klebs, to the present time, that the first glow of enthusiasm created by the supposed finding of the key which was to unlock this particular pathological mystery has subsided into a somewhat frigid skepticism as to its claim to bear a causal relation to pneumonia. But perhaps the monas will survive its foes, and yet substantiate its title to recognition. It may not be unprofitable to sketch briefly the history of the coccus which is thought to be the determining cause of pneumonia.

"'The monas pulmonale' was first described by Klebs in 1877. It was found by him in the lungs and ventricles of the brain and had independent motion.

"Eberth, 1881, gave more details regarding their characteristics, and described them as diplococci. He found them in the lungs and pleural exudation.

"Koch, 1881, found them in the kidneys and lungs, and gave further morphological details.

"Friedländer, 1882–83, described ellipsoidal cocci one millimetre long; also round cocci occurring chiefly in pairs, but also forming chains, found in the alveolar and in the bronchial fibrinous exudation. He has never seen them in the protoplasm of the cells.

"Leyden and Günther, 1882, found them in the fluid obtained from puncturing the lungs with a hypodermic needle.

"Griffini and Cambria, 1883, made pure cultures of the micrococci found in the *blood* of cases of pneumonia, and caused fatal septicæmia in rabbits and dogs (but *without* the occurrence of pneumonia) by injecting them subcutaneously. The same result followed the injection of sputum, blood, etc.

"Matrey and P. Seifert, 1882–83, found the 'characteristic cocci' in the sputum; *i.e.*, diplococci, but they think them pathognomonic.

"Strassman, 1883, found the same cocci in the mouth in health.

"Friedländer, 1883, described more closely the 'gelatinous envelope' previously discovered by Günther. He considered it characteristic of the coccus. He was able to produce typical lobar pneumonia in mice by the inhalation method.

"Emmerich and Fränkel inoculated mice with positive results. Rabbits suffered from fever for a day or two, but recovered. Fränkel does not consider the capsule characteristic.

"Platonow, 1885, has found capsulated cocci in sputum of many cases not pneumonic, and does not think that the examination of the sputum is of any value clinically. Injections subcutaneous in mice caused death without pneumonia.

"Inoculations upon animals are sometimes followed by septicæmia with pneumonia; sometimes by septicæmia without pneumonia. It may still be regarded as an open question whether the so-called 'pneumonia coccus' is the cause of the disease, or whether it only finds in pneumonic lungs a favorable soil for its development.

"In an article in the July number of the *American Journal of the Medical Sciences*, Sternberg shows, by carefully conducted experiments, that the pneumonia coccus of Friedländer is commonly found in normal human saliva. He shows also, what other experimenters have shown, that it is a pathogenic organism so far as certain lower animals are concerned, and that its pathogenic power varies under different circumstances. He concludes that it is extremely probable that it is concerned in the etiology of croupous pneumonia.

"If, however, the pneumonia coccus is one that we carry with us always in our buccal secretions, and so many of us happily with impunity, it looks as if we would have to invoke some other cause to explain its occasional virulence. This the bacteriologist is always prepared to do. The production of a proper soil is the only thing necessary to determine the auto-inoculation which produces the disease. This soil, they say, may be prepared by any of the depressing influences that belong to our environment or are begotten of our vices. This theory, of course, is capable of infinite expansion, and would solve many mysteries, if it were not that as physicians we are better prepared than most men to appreciate the wisdom of Mr. Billings' remark that 'there are so many things asserted in this world that ain't so.'"

DR. WILLIAM H. THOMSON said that the present time he was very much in harmony with Dr. Draper in one respect, and that was he did not know what to believe; and Dr. Draper certainly had not helped him out of that uncomfortable condition of mind. He was, however, inclined, more than twenty years ago, to believe that this disease is a specific fever. Two illustrations would suffice to afford some grounds for inferring that, in some cases, this is the character of the disease.

In children we have frequently a pulmonary affection which is characterized by a local disease, and occasioned by local causes, namely, broncho-pneumonia.

But now and then we see typical cases of croupous pneumonia, the cause of which is in marked contrast with the ordinary pneumonia of children, and which has given color at least to the belief that the disease in these cases is of an infective nature. The disease is ushered in by an evident shock, the patient presents all the appearances of having a rigor, to be followed by severe and prolonged delirium, accompanied by a high range of temperature, developed suddenly. No pneumonic process whatever can be detected for thirty hours perhaps, and afterward the pneumonia follows the ordinary course and terminates with sudden crisis. It is difficult to suppose, in these instances, that the disease is the same as that which occurs with bronchitis; but instead the entire clinical peculiarities in such cases point toward a specific fever, if there is anything which points to a specific well-marked infection.

The other illustration is from cases in which ulceration, endocarditis, and pneumonia occur simultaneously with meningitis, dependent upon true infection. Where we find an inflammation developed under such circumstances, and running exactly the course of pneumonia, and originating from a single focus of infection, it is easy to demonstrate the infective character of the affection.

Dr. A. Jacobi said that pneumonia meant an exudation into the open spaces and into the tissue of the lung, after an incipient stage of hyperæmia. In some cases the exudation into the air-cells consisted of albuminous matter, with a large number of lucocytes, more or less fibrin, now and then a few red blood-corpuscles, and some mucus.

In other cases there was less albuminous matter, more mucus, etc., but the process was about the same. The first was called croupous, the second broncho-pneumonia. The difference, anatomically, was very slight. Thus we had been wrong in discriminating too strongly between the croupous and the broncho-pneumonic process. So far as the coccus was concerned, Dr. Prudden had demonstrated that Friedländer's micro-organism is found not only in croupous but in broncho-pneumonia as a rule, which shows that the species belong to the same class. Dr. Jacobi would deny *in toto* that pneumonia must necessarily be a bacteric process. The question was not at all whether or not it was a fever produced by bacteria or some other poison. The question is not, is it a fever? The question is, may it be a fever? He would answer, yes. There were a large number of infective cases, and some of them were bacteric in origin. As illustrated by Dr. Thomson, the pneumonia occurring with ulcerative endocarditis might be bacteric and embolic at the same time, and at other times it was not of that character.

Dr. Kinnicutt said, even if Friedländer's differentiation of a specific micro-organism in *primary lobar pneumonia* should be shown to be incorrect, we were now in possession of a large number of careful observations, by competent physicians, demonstrative of the existence of such a disease as *epidemic* and *apparently contagious pneumonia*. One of many instructive accounts of such an epidemic had been given by Surgeon-Major Costello, of the Bengal medical service. "Thirty to forty fatal cases of primary pneumonia occurred in his regiment of five hundred and fifty men in the course of a few weeks. When it occurred among married men, it spread to the different members of their families; when treated in hospital, it spread to other patients ill of other diseases, and to the nurses. Removal from barracks to tents, and careful isolation of affected persons and their attendants, immediately arrested the progress of the epidemic."

In support of Friedländer's micrococcus, Dr. Kinnicutt would remind the members of the Section of the discovery of Dr. Emmerich, of Munich, who demonstrated that "the material used as stuffing between the ceiling and the floor of a jail, where epidemic pneumonia had long prevailed, contained numberless micrococci identical with those described by Friedländer." In the presence of many trustworthy reports of the occurrence of epidemic pneumonia, we at least must recognize the existence of a *contagium*, even if we do not accept Friedländer's discovery as final, in the etiology of a *certain number* of cases of pneumonia.

It seemed to him, therefore, that only two views of the nature of primary pneumonia were tenable. The one, advocated by many authorities, that in all probability there were two forms of the disease: one arising from cold or a like cause, the other zymotic; that these two forms were at present confused together, such as typhoid and typhus fevers had been in the past.

The other view maintained the *unity* of primary pneumonia and the constant presence of a specific morbific germ in its causation. As an individual opinion, based upon his own study of the disease, upon its many phenomena, Dr. Kinnicutt would say that the latter theory seemed to him the more tenable.

Dr. Delafield had listened with much pleasure to the remarks of the different gentlemen, because it seemed to him that they indicated a very decided change in the feeling of the profession, and a change in the right direction. It was only within a moderate length of time that certainly the fashionable belief was that lobar pneumonia was an infectious disease, that croupous pneumonia was always the same thing, and that catarrhal pneumonia was something different; that croupous pneumonia was the lesion of a general disease, and that catarrhal pneumonia was local inflammation. He thought the remarks made this evening had shown that if this belief had not been abandoned, it had at all events been shaken, and that the profession were beginning to appreciate that pneumonia was nothing but inflammation of the lungs, the modifications depending principally upon the age of the patient and the condition of the lung inflamed, and that like inflammation of any other part of the body might be produced by a great variety of causes.

Still further than this, the idea that typical lobar pneumonia is an essential fever he was glad to learn that Dr. Draper was no longer fully convinced of. For himself lobar pneumonia had always been a typical example of local inflammation, and not an infectious disease.

Dr. Jacobi thought the instances cited by Dr. Kinnicutt should not be taken as evidence of contagion, for he had, very many times, seen a large number of patients, particularly children in hospitals, taken at about the same time with pneumonia, because they were exposed to the same influences. Pneumonia was not contagious because ten or twenty cases developed in one locality at the same time, and he should say that the explanation of the occurrence of so many cases lay in the fact that the patients had been exposed to the same causes.

Collective investigation with reference to pneumonia, begun in this country in the Medical Society of the County of New York, had resulted in establishing the following facts, which were known to every one of us: Cold weather, wind, and moist atmosphere would give pneumonia. With a large rainfall, distributed over a large number of days in one month, especially when accompanied by cold weather and wind, pneumonia prevailed, it was called frequently an epidemic; but the frequency of the development of the disease was because a large number of people had been exposed to the same causes. Jürgensen and Koeller had said that pneumonia occurred principally in dry weather. Why? Because micrococci are in the soil, and pneumonia is a bacteric disease, and when the soil gets dry the micrococci get loose and give rise to the disease. That was the style of reasoning of some men who were called up as reasoners in bacteriology, to prove the reverse of what our fathers knew, namely, that pneumonia occurs principally in cold, moist, windy weather, when the soil is not dry.

Dr. Draper said Dr. Kinnicutt's remarks with regard to epidemics observed by Emmerich recalled to his mind

some facts concerning the history of cerebro-spinal meningitis, which he had occasion to study at about the time he was studying the subject of pneumonia. He found in the literature of that subject the history of a number of epidemics of pneumonia, some of them in this country, all occurring under similar conditions, mentioned by Dr. Kinnicutt, in jails, camps, etc. As he had already stated, while he thought that epidemics of that kind went far to prove that pneumonia might be, under certain circumstances, an infectious disease, he also thought that they proved that only of the epidemics, and did not prove it of all cases of pneumonia.

Thus, cerebro-spinal fever produces sometimes extremely violent lesions, pulmonary, arthritic and meningeal, and all these lesions may occur in the same patient; the arthritic and the meningeal lesions frequently occur together. Whether cerebro-spinal meningitis is an infectious disease or not is still a mooted question, but circumstances seem to favor the view that it is a specific fever. He had, in conclusion, only to reiterate that it was impossible for us to decide the question, and that the limits of our knowledge at present compelled us, as Dr. Delafield had said, to regard pneumonia as an inflammatory disease, and beyond that we did not know. It was pleasant to speculate, perhaps profitable, but whether profitable or not, in view of present existing theories, could only be determined at some period in the future.

The Section then adjourned.

MEDICAL CHARITY AND THE CHARITY ORGANIZATION SOCIETY.

On Friday evening, November 20th, a large number of physicians and gentlemen who are connected with charitable medical institutions met at the hall of the Academy of Medicine, in answer to invitations issued by the Charity Organization Society, to consider measures for reducing, through co-operation with the Charity Organization Society, the existing abuses and misapplication of medical charity. The chairman of the meeting was John Harslen Rhodes, a Director of the New York Eye and Ear Infirmary. Those who have been connected with charitable institutions for years in this city have noticed, he said, the great increase of paupers who applied for aid. By paupers he meant people who wanted for nothing what they were able to pay for. The question to be settled by the meeting was, how to remedy this abuse. The difficulty of separating the pauper from the poor man existed because the charitable medical institutions did not pull together. This difficulty, in a great measure, had been overcome by the formation of the Charity Organization Society.

Charles D. Kellogg, Secretary of the Charity Organization Society, explained its object and working. It was founded in 1882 for the purpose of increasing the efficiency of all charitable institutions and to elevate the condition of the poor. Such alliances exist in many European cities and in forty towns in this country. Its register shows the names of 98,000 families who have applied for relief since its organization. Cards are furnished by it to all charitable institutions. These in turn, if they return the cards with the names of those who apply to them for relief, are furnished with such information about the applicants as proves them to be worthy or unworthy of gratuitous relief. To show that much of the relief given is unworthily bestowed, Mr. Kellogg gave some statistics. Of 79 applications at one hospital in this city, 24 were able to pay for relief and 27 could not be found at the addresses given. At another time 400 applications were investigated. One-third of the number were unworthy, and one-third had given false addresses.

Dr. J. West Roosevelt offered the following resolutions favoring the use of the system of the Charity Organization Society by all the hospitals and dispensaries of the city:

"It is the sense of the representatives of the several hospitals and dispensaries of the city here assembled that steps should be promptly taken to reduce, and, if possible, prevent imposition upon medical charities and to insure that the contributions of the charitable are used only for the benefit of the destitute and not wasted upon persons who can and should pay a physician for his attendance.

"*Resolved*, That the best existing remedy lies in the use of the methods and system of the Charity Organization Society."

Mr. Kellogg stated that London and New York furnish medical aid to more than one-fourth of the inhabitants. Boston to a little less than one-fourth, and Philadelphia to one-fifth.

Dr. Roosevelt thought the provident dispensaries could not be made successful in this country. He thought that not more than 150,000 to 175,000 people received medical aid last year in this city.

Dr. Samuel Hall seconded Dr. Roosevelt's resolutions and made some remarks to show the advantage of charging a small fee for medicines. This sum would be saved from drink and be a direct gain. He said that the Northern Dispensary treats but two-thirds of the number of patients it did ten years ago and does much more good.

Dr. Walter L. Carr spoke of the increase of the pauper classes by immigration. He mentioned the college clinics as asking for patients, and suggested that some arrangement be made by which the dispensaries could supply the needed material so as to prevent the present abuse. The Charity Organization Society, he thought should have control of the dispensary districts, and new institutions should not be started unless the Society sees some need for them.

Dr. S. O. Vander Poel said that doctors give one-third of their time to charitable work. The young physicians are indirectly the cause of the trouble, as they are anxious for the dispensary practice. He then read a letter from Dr. T. T. Gaunt, of the New York Dispensary, showing investigation of 845 patients by the Society for Improving the Condition of the Poor. Of these cases 504 were deserving, 235 were not, 38 were doubtful, and 68 were not found. Dr. Vander Poel proposed that a committee of representatives from some of the best-known institutions be appointed to confer with the Charity Organization Society.

Dr. Newman thought that Dr. Vander Poel's committee would be partial, and said that medical men should be added.

Dr. A. Siebert spoke of the work done by the Organization Society at the German Dispensary. Of 434 investigated, 107 gave wrong addresses; 187 were fully able to pay; 42 able to pay small fees; 75 unable to pay; 23 no answer.

Dr. Mary Putnam-Jacobi said that it is hard to decide what is the proper income by which to regulate whether a man shall apply to a dispensary or not.

Dr. A. Jacobi thought that dispensaries could help the poor by aiding them to bridge over the first years of their poverty, then when they get better positions they can pay family doctors.

Mr. McNeil, of the Northwestern Dispensary, spoke against the Charity Organization Society. He said that people should be glad to be cheated once in a while when doing a charitable act.

After some discussion, in which a number took part, the following gentlemen were appointed by the Chairman to confer with all the medical charities of the city and the Charity Organization Society, with power to call another meeting: Mr. Hewlett Scudder, Demilt Dispensary; A. B Ansbacher, Mt. Sinai Hospital, and Drs. S. O. Vander Poel, J. W. Roosevelt, and J. H. Emerson. The Chairman was added to this committee by popular vote.

Among those present besides the gentlemen who took part in the discussion, were Drs. C. R. Agnew, R. H. Derby, Robert F. Weir, F. R. Sturgis, S. D. Powell, H. J. Garrigues, D. Webster, and Charles E. Young.

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DIPHTHERIA AND ITS MANAGEMENT.[1]

ARE MEMBRANOUS CROUP AND DIPHTHERIA DISTINCT DISEASES?

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SOME apology is needed for presuming to bring before this Section a paper on the treatment of diphtheria, when it has been discussed here so recently; my apology is that, notwithstanding all the ability which has been devoted to it, diphtheria still remains the most defiant of the so-called zymotic diseases.

Before discussing the management of diphtheria let us understand what the term includes. Does it comprise all cases of membranous croup? Are croup and diphtheria identical diseases?

The word croup, or croops, was first used by the peasantry of Scotland to designate a series of phenomena due to obstruction in the windpipe. This appellation was introduced into medical literature by Dr. Patrick Blair in 1718, thus: "The tussis convulsiva, or chink-cough, is also some years epidemical, and becomes universal among children, as is a certain distemper with us called the croops. . . . This convulsion of the larynx, as it begins, so it continues, so violently, that unless the child be relieved in a few hours, 'tis carried off within twenty-four or forty-eight hours."[2]

The word does not seem to have taken root in the medical mind, however, for it was not generally adopted until 1765, when a monograph by Dr. Francis Home appeared, entitled "An Inquiry into the Nature, Cause, and Cure of the Croup," which attracted universal attention. Dr. Home believed croup to be an independent disease, due to exposure to cold. In 1771 Dr. Samuel Bard, of New York, in a careful monograph, pointed out the fact that the croup of Home was but a complication, or a form of the "angina suffocativa." In this classical treatise Bard clearly proves that the "sore throat distemper," or contagious sore throat, then epidemic in New York, was identical with the croup of Home. After Bard, Ruppius, of Baden, and Bretonneau, of Tours, wrote to the same effect, but Bard's treatise antedated theirs by nearly half a century, and to him alone is due the honor of showing distinctly that croup is not an idiopathic disease arising from cold.

Although Bard's investigations were made in New York, and his work is in the possession of the Academy of Medicine, where it may be consulted by any one, most physicians of this city maintain that membranous croup and diphtheria are distinct diseases; and that while membranous laryngitis does occur as a complication of diphtheria, it may also occur independently of the latter, arising solely from exposure to cold and wet. This is not only maintained, but it is taught in the several medical schools of this city.

Dr. Jacobi is the only physician I know in New York who believes that diphtheria and croup are identical.

The reasons assigned for regarding these diseases as distinct from each other are, that pseudo-membranous croup occurs sporadically without the presence of diphtheria, arising simply from exposure to cold. But diphtheria occurs sporadically, and sporadic diphtheria may primarily attack the larynx.

The existence of a pseudo-membrane in the lower part of the larynx and in the trachea is no evidence of the non-diphtheritic origin of the exudate. Neither the extent nor the histological structure of the false membrane affords ground for a distinction between these two affections. Morbid specimens from cases termed croup and from cases of diphtheritic laryngitis cannot be differentiated by the pathological anatomist.

Sporadic pseudo-membranous laryngitis has been known to convey diphtheria in its most pronounced form. Again, a mild case of diphtheria may give rise to no symptoms to attract attention to the existence of the malady until the complication of croup obtrudes it on the attention of the parents or nurse; and in the event of such a case proving fatal, pseudo-membrane in the larynx may be the only lesion of a diphtheria which primarily involved the tonsils and pharynx, where all evidence of the disease has disappeared during, and subsequent to, its spread downward.

The occurrence of marked paralysis, after so mild an attack of diphtheria as to be almost overlooked, is sufficient evidence that the cases of membranous croup which are said not to have been preceded by diphtheria, may have been diphtheria of an equally mild type, in which croup was the first symptom to attract attention.

Croup is claimed to be a sporadic, diphtheria an epidemic disease. Dr. Blair, who first described croup, speaks of it as an *epidemical* disease, and as one which sometimes becomes *universal* among children. From the time of Home to this date, numerous writers have recorded epidemics of membranous croup. The following authors describe it as a disease *distinct* from diphtheria, although they have met with croup in epidemic form; for instance, Churchill says: "It sweeps over a family, leaving behind it distress and desolation."[1] Tanner says: "Occasionally it appears to prevail as an epidemic."[2]

"As it (croup) may from these causes be endemic in particular situations, so, from the prevalence of cold east winds, particularly after damp relaxing weather, it may be epidemic at particular seasons."[3]

"Temperature, together with some endemic or *epidemic influence*, has to be admitted."[4]

It is maintained that croup is not contagious, while diphtheria is.

Cases have been reported where membranous croup having attacked one in a family, other members of the same family have suffered immediately from diphtheria of the tonsils and pharynx (Ranke, Wilks, Woodman).[5]

A young girl who had not been exposed to the same atmospheric influence as her sister, already ill with croup, was attacked by it after having been playing with her at the same time when her disease was completely developed."[6]

Gregory says: "I feel myself bound to act upon the

[1] Read before the Section of Obstetrics and Diseases of Women and Children, New York Academy of Medicine, November 25, 1885.

[2] Observation in the Practicks of Physic. By Patrick Blair, M.D., F.R.S. London, 1718.

[1] Churchill: Diseases of Children, p. 307. Dublin, 1870.

[2] Tanner: On Infancy and Childhood, p. 268. Philadelphia, 1871.

[3] Library of Med., vol. iii., p. 57. London, 1840.

[4] Squire on Croup, in Reynolds' Syst. of Med. In 5 vols. Vol. i., p. 73.

[5] Royal Medico-Chirurgical Transactions, 1879, vol. lxii., pp. 51, 52. In this connection Dr. Woodman's statements on p. 56 are interesting.

[6] The Study of Medicine. By John Mason Good. Vol. ii., p. 449. London, 1829.

principle that croup in its worst, or most malignant form, is capable of being communicated by contagion." [1]

Copeland says: "Several authors have adduced facts to show that the disease may occasionally prove infectious. . . . It has most indubitably manifested this property when it has prevailed epidemically. . . . When croup occurs in one child of a family residing in situations where it prevails, more will probably be attacked." [2]

"Some practitioners have supposed the disease (croup) to be contagious because, forsooth, two or three children in the same family have fallen victims to it within a few days. They have overlooked the fact that in such cases all the children had been exposed to the same exciting cause, viz., a damp and cold state of the atmosphere." [3]

The croup of Dr. Hamilton, as described in his work, is, if studied in our modern light on the subject of diphtheria and croup, clearly nothing else than diphtheritic croup.

Cheyne [4] says: "I have no reason to think that croup is a contagious disease. Some winters since, within ten days, I attended two children in the same house, laboring under the second stage of croup; but both had been exposed. . . . When a physician has to visit more children than one with a croupy affection, in a family or neighborhood, he ought carefully to examine the state of the fauces."

Certainly one could make no other version of *such* cases of croup, except that of diphtheritic laryngitis.

Home, the historian of croup, seems to have met with a contagious form of the distemper, as he terms it, in Cases 4 and 5. These were brother and sister, the latter being attacked with the disease six days after the former, in both of whom it proved fatal. Home's symptomatology and dissection appearances in these cases make them undoubtedly cases of diphtheria with laryngeal complications.

Diphtheritic laryngitis is much less contagious than tonsillar and pharyngeal diphtheria, as it is evident that it would be, owing to the seat of the disease, but the contagious property in the cases of so-called non-diphtheritic croup has been as marked as we ever note it in diphtheritic laryngitis. *It is certain that an idiopathic laryngitis arising from cold could no more be contagious than bronchitis from the same cause.* The lymphatics are said not to be enlarged in croup, while they are so in diphtheria. The fact is, that in membranous laryngitis the cervical lymphatics may be involved, while glandular enlargement is not a necessary attendant on diphtheria. Swelling of the cervical lymphatics in laryngeal disease does not depend upon the character of the affection, but rather upon the amount of disease in adjacent structures, as shown by the absence of lymphatic involvement in malignant disease strictly limited to the larynx.

The condition of the lymphatic glands is no criterion of the nature of the laryngeal affection. So albuminuria may be present or absent in either. It is held that croup is a sthenic, diphtheria an asthenic, disease. Croup may be, and oftener is, an asthenic, while diphtheria may be sthenic, depending upon the condition of the subject attacked and the character of the epidemic.

Sthenic and asthenic diphtheria have been seen in the same house, the former in a robust German child, the latter in a delicate, sickly child. The degree of febrile and circulatory reaction may be mild or severe in either croup or diphtheria, and is not of the slightest diagnostic value.

Paralysis and other sequelæ remain long after the local symptoms have disappeared in diphtheria, while it is said that croup has no sequelæ following in its train. Paralysis after diphtheria is not often met with, and recovery from diphtheritic laryngitis is very rare; hence paralysis as a sequela of diphtheritic membranous laryngitis must be a rare event. Yet cases of paralysis following "membranous croup" have been reported. In fact, everything that has been written by those who have contended that membranous croup is an independent disease, distinct from diphtheria, is merely a compromise, and does not give one tenable diagnostic characteristic between them.

Many of the cases of croup recorded by various authors, and many of the descriptions in the text-books are, in the light of present pathology, clearly cases of diphtheria.

Case 5 (p. 17), of Dr. Francis Home,[1] was certainly one of diphtheria, probably contracted by contagion from Case 4 (p. 14), the brother of Case 5. Case 7, as related, presents to us the usual course of diphtheria, with laryngeal complications; the boy being allowed to walk about, and consequently exposed to cold, a reaccession of the symptoms occurred. Treatment apparently controlled the disease again, when there was a second exacerbation, during which the child died of croup. As is *usual* in such cases, the diphtheritic inflammation *then* involved the larynx only.

Home says himself of this case, "I suspected that there was considerable mixture of the angina with the croup here." On page 36, in his conclusions, Home says (Corollary iii.): "In some of the former cases the whole glands, at the root of the tongue, and the *amygdalæ* were turgid, and the parts covered with mucus." Again he says (p. 51): "This disease appears, in general, to be a very dangerous one, and the more so as it is silent in its progress, and gives no visible alarm till death is near at hand. The first stage of this distemper often passes unobserved, and before we see it, is beyond all remedy." This is exactly the experience which we too often have with diphtheria now in New York.

Bard [2] in his monograph says what any intelligent observer would say after a careful analytical study of Home's *croup*, p. 14: "Such a remarkable agreement in the symptoms is of itself almost sufficient to determine these diseases to be the same, but when we compare the appearances from dissection, it is placed beyond a doubt."

Dr. Austin Flint, in his article on Diphtheria, says: "Regarded from a clinical point of view, it seems to me clear that this question (Are diphtheria and croup distinct diseases?) is to be answered in the affirmative" (Flint's Practice, 1881, p. 1082). In his article on Croup (op. cit, p. 295) he says: "The exudation, in the form of a false membrane, is found in the larynx and trachea; it is also present, as a rule, in the pharynx, on the tonsils, *soft palate*, base of the tongue, or epiglottis. . . . The larynx may be primarily affected, or the false membrane may appear first in either the pharynx or the trachea; the point of departure of the inflammation and exudation being in some cases the larynx, and in other cases the pharynx, oftener the latter" (p. 298). Unmistakably this description can apply to nothing else than diphtheria.

In former diphtheria epidemics it appears, from the descriptions handed down, that diphtheritic laryngitis must have frequently occurred independently of any membranous affection of the throat above, and even now in some places, according to the evidence of many good observers, it is occasionally met with, but at the present time it certainly occurs almost exclusively with diphtheria of the throat.

I have never seen a case of membranous laryngitis of non-diphtheritic origin, although I have been called in consultation to many cases of so-called croup. Nor have I met with a case in which there was a membranous ex-

[1] Theory and Practice of Medicine. By George Gregory. P. 225. London, 1835
[2] A Dictionary of Prac. Med. James Copeland, M.D., F.R.S. In 4 vols. Vol. i., pp. 458 and 472. London, 1858.
[3] James Hamilton: Diseases of Infancy and Childhood, pp. 144, 145. Edinburgh, 1813.
[4] The Pathology of the Membrane of the Larynx and Bronchia. By John Cheyne. Pp. 18, 19. Edinburgh, 1809.

[1] An Inquiry into the Nature, Cause, and Cure of the Croup. By Francis Home, M.D. Edinburgh, 1765.
[2] An Inquiry into the Nature, Cause, and Cure of the Angina Suffocativa, or Sore-Throat Distemper. By Samuel Bard, M.D., Professor of Medicine in King's College, New York. 1771.

udate in the larynx, but that there was some evidence of a diphtheritic process in the parts above, either preceding or subsequent to the laryngeal affection. Even in cases where no patches of membrane were discovered in the fauces during life, patches of exudation were found about the posterior nares or at the root of the tongue after death.

Sudden vicissitudes of atmospheric temperature, especially in combination with rain, constitute the principal cause of croup, according to those who claim that croup is an independent disease. Nothing is more common than catarrhal laryngitis with croupy symptoms in a young child at the same time, what would be more phenominal in the varied experience of a physician than for such a case to terminate in pseudo-membranous laryngitis? This catarrhal croup may last several days, and it may become chronic, but has it *ever* been seen to terminate in membranous croup?

I have had three such chronic cases within the last four years. One died since of pneumonia; I found at the post-mortem examination congestion and thickening of the mucous membrane lining the larynx, and infiltration into the submucous tissue of the subglottic region, with subchordal swelling, but there was no pseudo-membrane. This child had had a croupy cough with paroxysms of dyspnœa for twenty months previous to its death. The other two are living, and apparently quite comfortable, with the exception of a most distressing croupy cough and dyspnœa when excited, or when there is a sudden change of atmospheric temperature. We have all met with instances where a young child, after coming out of its bath, having been allowed to be about naked and exposed, has an attack of catarrhal croup, which, in the severity of its symptoms, has apparently placed life in immediate jeopardy, yet such cases *never* terminate in membranous laryngitis. If a child already ill with diphtheria should suffer the same exposure, the catarrhal laryngitis will rarely fail to invite the diphtheritic inflammation to the larynx, and induce the formation of a pseudo-membrane. Though membranous laryngitis occurs in diphtheria in adults, who has seen even the oft-repeated attack of severe laryngitis in the adult terminate in the membranous form, which it surely would if one were merely a higher degree of the other, no special cause or element being necessary?

We frequently meet with cases of loss of voice in the adult after exposure to cold, which lasts many days without causing any inconvenience, passing off without treatment, and never attended with the discharge of false membrane. Nor does the more acute laryngitis, with high fever and symptoms dangerous to life, produce the membranous exudate which so quickly results when diphtheritic inflammation attacks this organ. The simple laryngitis of both adults and children may exist for months, even almost indefinitely, without showing any disposition to extend into the deeper air-passages; but diphtheritic laryngitis manifests this tendency very quickly, and always early involves the trachea and bronchi. Dr. Geo. Johnson says:[1] "For myself I may say that, having diligently worked with the laryngoscope for twelve years, I have never seen croup with a membranous exudation in the larynx which was not the result of diphtheria." The laryngoscopic investigations of Dr. C. Rauchf ss and Dr. Karl Dehio in the laryngeal affections of children have made clear many forms of acute laryngitis in them hitherto obscure. First Rauchfuss, and after him Dehio more fully, showed, that in acute laryngitis with œdematous infiltration of the submucous tissue below the vocal cords, especially where the cords are inflamed and swollen, there is laryngeal stenosis, with the same cough, dyspnœa, and loss of voice that we have from membranous obstruction at the rima glottidis; symptoms which we have been accustomed heretofore to refer to pseudo-membranous laryngitis. In acute diffuse laryngitis, with subchordal œdema, we may have all the symptoms of membranous laryngitis, except the laryngoscopic and post-mortem appearances.

These facts, their recent discovery, and the statement of Dr. Johnson, make it not only probable, but altogether presumable, that some of the cases of so-called membranous croup of non-diphtheritic origin were cases of acute subchordal swelling with stenosis. While it is conceivable that pseudo-membranous laryngitis may occur idiopathically from exposure, we feel justified in the conclusion that, after careful clinical and pathological studies, no one has yet proved that such is the case.

Again, if membranous laryngitis, as the outcome of cold, does occur, it cannot be differentiated clinically or pathologically from diphtheritic croup.

The committee appointed by the Royal Medico-Chirurgical Society in 1879 to make investigations as to the identity of croup and diphtheria, state that[1] "notwithstanding urgent and repeated public appeals, no single case of membranous exudation in the larynx resulting from exposure to cold has been furnished to the committee."

Quite recently I have found evidence, striking enough in itself, of men like Sir Thomas Watson, Sir Wm. Jenner, Dr. Charles West, and others of equally high repute, who at one time maintained that croup and diphtheria were distinct diseases, but now express their opinions to the contrary. Sir Thomas Watson in his article on Diphtheria, says:[2] "Some analogy to this disease (croup) it certainly has, but the points of difference are stronger and more essential."

"We are now prepared for the consideration of a most important question. Is the disease, which has for so many years been called in this country the croup, and which is attended with a membranous exudation in the larynx, anything else than diphtheria? I believe it is not. I believe, with Dr. Johnson, that ever since Dr. Home's pamphlet on 'Croup' was published, in 1765, our writers on the subject have given us the history, the symptoms, and the treatment of acute catarrhal laryngitis, with the morbid anatomy of diphtheria."[3]

"Are diphtheria and croup essentially the same disease? I think not."[4]

"My opinion has undergone some modifications, and I am inclined now to the belief that there is no such disease as idiopathic, simple, membranous inflammation of the larynx. I say I am inclined to the belief. I am not sure that this is true, but as I formerly thought that the weight of evidence was in favor of their non-identity, I am now inclined, from my further experience, to think that the two diseases are really identical, that the so-called croup is really diphtheria."[5]

"There are, indeed, two diseases which have often been included under the common name of croup, though the points of difference between them are at least as numerous and as important as are those in which they resemble each other.

"If we extend our inquiry beyond the mere changes wrought in the respiratory organs, the differences between croup and diphtheria at once become apparent. Different, however, as these two diseases are, there are yet between them points of similarity no less striking (p. 323)."[6]

"For all practical purposes membranous laryngitis or membranous croup must be regarded as the outcome of diphtheria, and consequently as essentially different from catarrhal croup or catarrhal laryngitis.[7] . . . Diph-

[1] London Lancet, 1859, vol. i., p. 252.

[1] Royal Medico-Chirurgical Transactions, 1879, vol. lxii., p. 15.
[2] Watson's Practice. American Reprint, from Fourth English edition, p. 564.
[3] Watson: Practice of Physic. From Fifth English Edition, vol. i., p. 873. Philadelphia, 1872
[4] Dr. William Jenner: Diphtheria, its Symptoms and Treatment. London, 1861.
[5] Sir William Jenner, London Lancet, January 16, 1875, vol. i., p. 75.
[6] Diseases of Infancy and Childhood. By Charles West. pp. 322, 323. Article on Croup. Article on Diphtheria, p. 350. Philadelphia, 1874.
[7] Diseases of Infancy and Childhood. By Charles West. p. 413. London, 1884.

theria, then, is the disease, croup but one of its symptoms.

"I have been well-nigh fifty years in coming to this conclusion. I do not know that my confession of faith loses in value because I have been a tardy convert tomy creed."

Although cold has been regarded as the principal etiological factor of croup, since the time of Home, it is clear to us that it cannot give rise to a membranous exudate in the larynx, except with the presence of the diphtheritic poison.

If membranous croup, then, is only a complication of diphtheria, is it the natural tendency of diphtheria to propagate itself into the larynx, or is this an accident of the disease, which, with due precaution, can be evaded?

We have the question, then, What relation does cold bear to croup as a complication of diphtheria? We all know that a catarrhal state of the mucous surface of the pharynx and larynx favors and hastens the spread of the diphtheritic inflammation. Catarrh, therefore, becomes the great predisponent of diphtheritic laryngitis, and exposure induces catarrhal inflammation the more readily in a child depressed by diphtheria.

When diphtheria occurs in a child recovering from, or who has recently had severe measles, there is a special tendency to laryngeal complications. Scrofula, rachitis, etc., with catarrh of the mucous tracts, also make us especially apprehensive of this accidental danger.

In corroboration of the view that cold and catarrhal inflammation predispose to,[1] and even directly cause, the spread of the diphtheritic process into the larynx, we see that croup complicates diphtheria more in autumn, winter, and spring, than in the summer; that it occurs especially after sudden vicissitudes of temperature and rainfall, in connection with, or soon after, prevailing east or northeast winds,[2] more in boys, who are more exposed, than in girls,[3] and that it is more prevalent in rural than in urban districts.[4]

Pseudo-membranous laryngitis is a more frequent complication in sporadic diphtheria than it is when the malady is epidemic. I assume the explanation of this to be the greater care taken at the time of an epidemic, the nature of a larger proportion of the cases being earlier recognized, and the patients being more likely to be confined to bed, thus removing the accidental element in the causation of this complication. The greater hardihood of boys and their unwillingness to complain, and their consequent exposure, is, I believe, the reason of the greater frequency of diphtheritic croup in them.

In country districts where less is known by the people about diphtheria, where the more robust children give less heed to its first symptoms, and where, in consequence, a physician is not so early summoned, *croup* is more common than in the city, where it (membranous croup) is scarcely ever heard of except among the very poor, but as a complication of a previously recognized diphtheria.

We have all seen exacerbations of diphtheria from cold. A patient allowed to go about during convalescence suddenly has an augmentation of all the symptoms; this is the more likely to occur if there is a sudden fall of temperature, but even in the absence of this, exhaustion of the patient's powers causes a relapse, and a spread of the inflammation. Not unfrequently such a relapse proves more severe than the first attack, and if there has been marked exposure, the disease for the first time shows a disposition to, and does extend into, the larynx.

It is not the cases in which ulceration and sloughing of the throat occur from the very commencement (a circumstance which indicates a more intense form of the disease), that the larynx is most frequently involved, but rather in the so-called mild types of the disease, in which the patient, not being considered very ill, is allowed to expose himself, and exhaust his strength; both the exposure and the exhaustion promoting the extension of the morbid process. Although croup may be an unavoidable complication in some cases of diphtheria, my experience forces upon me the conviction, that it occurs for the most part in cases where there has been exposure and undue exhaustion, which would tend to show that croup is not so much a necessary consequence of diphtheria as its frequency would seem to impart. It follows, logically, that by judicious management, we can, in many cases, prevent this complication. To manage patients with diphtheria, so as to prevent the occurrence of croup, would be casting an anchor of safety in a large proportion of the now fatal cases. It may seem unnecessary to urge the importance of keeping patients with diphtheria in bed, but I know that it is common in the practice of many physicians to allow patients with extensive exudation to go about the house; and in many of the mild cases the patient is not confined to bed throughout the entire period of the disease. Although physicians do not often relate or record cases exemplifying this negligence, yet such cases are recorded, and they show distinctly that between cold and croup as a complication of diphtheria, there is the relation of cause and effect.

In the *British Medical Journal*, June 25, 1849, p. 498, it is stated that "Case 45 died of laryngitis, from imprudent exposure during recovery from diphtheria." By turning to the record of the case, we find that the girl got up and went out of doors while making favorable progress toward recovery.

Another case is found in the "Transactions of the Medical Society of Pennsylvania," for 1879, p. 888, by Dr. G. A. Linn, in the following words: "An older child (three years) seemed to be doing well on the treatment, when, from exposure to wet, during the funeral of the other, he grew suddenly worse, the membrane formed in the windpipe, and he died from obstruction." This instance is often repeated in the tenement-houses in New York.

In the *British Medical Journal*, July 4, 1863, p. 4, in connection with Case 7, it is stated that "the throat having cleared off, pain in swallowing increased. He could be persuaded to swallow only milk, and very reluctantly gargled or permitted any cleansing of the throat. Still he held his ground for a fortnight; was able to walk about his room and went for a drive, so that we hoped he would gradually get better. There was no indication of affection of the lungs or trachea, till one night he was attacked with cough, bloody expectoration, and dyspnœa, with râles all over the chest. In the fluid expectorated we found some branching strings of tenacious mottled substance, which were evidently casts, in lymph of the air-tubes. He could not swallow anything, and rapidly sank and died in the middle of the next day."

Squire[1] says: "A child has been taken out for a walk on the fifth day with a temperature *in recto* of 103.7° F.,"

[1] "The majority of cases occurred in winter and spring; in other words, at a time when catarrhal disorders are of most frequent occurrence" (A System of Practical Medicine. By American Authors. P. 682. Philadelphia, 1885).

[2] "It is generally believed that, according to observations the larynx and air-tubes are far more frequently affected with the disease in the cold and dampness of winter than in the warm summer months" (Ziemssen, vol. i., pp. 583, 584).

"The statistics of Wibmer show a greater prevalence of the disease during the winter, especially from September to December, which period had afforded an especially high mortality in diphtheria, in comparison with the months from April to August, when the mortality from diphtheria was at its minimum, 1864–69" (Ziemssen, vol. i., p. 583).

"Variable climates and cold wet weather favor the onset of laryngeal symptoms" (Royal Medico-Ch. Tr., 1879, vol. xxii., p. 10).

"It (croup) has been found to be most prevalent during moist, cold, changeable weather, and in many cases the attack seems to be immediately due to exposure to sudden changes of temperature or to cutting north and northeast winds" (Steiner in Ziemssen, vol. iv., pp. 236, 237).

"Out of 467 epidemics of croup, collected by A. Hirsch, 159 belonged to winter (December, 56; January, 48; February, 33); 130 to spring (March, 51; April, 42; May, 37); 72 to summer (June, 21; July, 23; August, 38); and 106 to autumn (September, 22; October, 41; November, 42)" (Steiner, in Ziemssen, vol. iv., p. 237).

"The deleterious influence of moisture is shown by Crawford's observation, that in Scotland croup, which had hitherto been a common disease, became rarer after the drying of marshy districts" (Ibid., p. 237).

[3] "The male sex is more frequently affected than the female; in my own cases, out of 101 children, 77 were boys and only 24 girls. In Bohn's 70 cases, 43 were boys and 27 girls. Ruehle gives the proportion of boys to girls as 3 to 2" (Steiner, in Ziemssen, vol. iv., p. 235).

[4] "There is ground for the belief that that form of the disease which issues in membranous laryngitis is less common in cities than in damp or bleak country districts, or in exposed situations on hill-sides, and thus probably because such localities are favorable to the occurrence of catarrhal ailments" (West, 7th ed., 1884, p. 415).

[1] Op. cit., p. 121.

and "a young man was found dressed and walking about on the ninth day of illness, with a surface temperature of 102° F. On being kept in bed the temperature fell two degrees in two days; the exudation then ceased to extend."

"The peculiar features by which the eye of experience already recognizes a great and closely impending danger while the unbroken spirit of childhood is yet scarcely checked in its playfulness."[1]

Mackenzie[2] says: "Whenever there are signs of approaching cardiac failure, it is important to keep the patient in bed with his head low, and to interdict any movement whatever."

These quotations, from such wide sources, show that there is not the importance attached to prevention of exposure, to absolute rest, and to conservation of strength, which seem to be demanded in this malady. Frequently practitioners have said to me, "The child has not seemed to be very ill, and he has not been kept in bed, but the local process has steadily advanced."

In patients kept in bed there is rarely seen that extreme prostration so common in diphtheria, nor do we so frequently meet with the slow, feeble, and irregular or the very fast pulse. *If allowed to be up asthenia and the exudation advance together, the one increasing the other.*

Absolute rest in bed is demanded, then, in diphtheria, from the appearance of its first symptoms until convalescence is complete.

It preserves the failing strength, it lessens the spread of the exudation, it prevents exposure, and all these diminish the liability to laryngeal implication. With this management, if a child has been under observation and treatment for three or four days, and there is no involvement of the air-passages, it is not likely to occur, and the prognosis is good. Does cutaneous diphtheria, or diphtheria of an external wound, ever give risê to croup, without first appearing in the throat above the larynx? Although I have seen many cases of wound diphtheria, I have seen no tendency for it to give rise to croup without throat diphtheria.

Nasal diphtheria does not produce croup except by extension (see p. 626). While croup does not occur as a complication of wound diphtheria without having first involved the throat above, paralysis occurs as a sequela of cutaneous, wound, and nasal diphtheria, without the disease having appeared in its most usual site—the throat.

All the cases which have come under my care testify to the correctness of this view, that croup as a complication of diphtheria is usually accidental.

The treatment of diphtheria is far from having reached that unity which might have been expected from the attention which has been devoted to its consideration. The number of remedies to which physicians are continually having recourse proves the inefficacy of the greater number of them. Some remedies which have recently been highly recommended, if used as unsparingly as their advocates directed, would certainly be injurious, while others have been tried and proved to be useless. If we study the death-rate of this disease, we must confess that, up to the present time, we have not, on the whole, been very successful with any mode of treatment. It is easy to be deceived in regard to the usefulness of a remedy employed against diphtheria, for some cases will do well with very little treatment, provided they receive good care; on the other hand, where a case or a number of cases are not influenced, or at least not favorably affected by the treatment, we are too prone to tell the parents that it is a case of unusual virulency, or one of malignancy, instead of examining into our comprehension of the case, and our treatment of it, and admitting that the cause of failure to cure lay here. True, there are cases of diphtheria of great malignity, but if we were to adopt a system of rational therapeutics to meet the indications of each individual case, based on well-considered physiological and pathological data, we would hear less about malignant diphtheria.

We are too apt to be wedded to particular methods of treatment, and believe in their excellence, without giving due regard to the indications of cure furnished by the epidemic character of the disease, the constitution and diathesis of the patient, the character of the symptoms, the disordered functions of the important organs of secretion and excretion; the modes and paths of elimination of the virus of the disease; the disposition to certain complications; the prevalence of other epidemic diseases which might modify its course; and the season of the year Each and all of these conditions should be our chief guides, as in every case much depends on the precision with which the exact *nature* of the case, and the state of the vital powers are ascertained. The mode of treatment in vogue has for its object (according to its exponents) to attack the poison or germ of the disease, as an entity, and destroy it, leaving out of view every other consideration.

Physicians in search for such a specific are distracted from a rational treatment. These experiments have doubtless killed more patients than germs.

The enthusiasm with which all the mercurials are now recommended as a cure for diphtheria, would lead one to suppose that a true specific had at last been found—calomel, bichloride, biniodide, etc., internally, inunctions of mercury, and mercury by hypodermic injections. The calomel treatment introduced by Rush was used with considerable success by Bretonneau, Trousseau, Guersant, Blache, Bouchut, and many others, who derived much advantage from it; but they did not employ it indiscriminately, nor to the exclusion of other measures. In time, however, it came to be used to excess, and was finally abandoned as being injurious.

The distinguished Dr. Stokes said of it: "The mercurial treatment of croup is insufficient and unnecessary."

Dr. Rush used calomel as a derivative in croup, and this use of it unquestionably is serviceable if we do not use it to the degree of depressing our patient. He says:[1] "Its good effects seem to depend upon its exciting a counteraction in the whole intestinal canal, and thereby lessening the disposition of the tracheal blood-vessels to discharge the mucus or form the membranes which have been described." Recently this treatment has been revived, and there is evidence already that instead of using it with a cautious, discriminating judgment, it is being again abused.

We read of calomel being administered in forty-grain doses in serious cases of diphtheria, and one hundred grains in twenty-four hours.[2]

It almost constitutes malpractice to give such a dose to a young child depressed by the poison of diphtheria.

Again we are told:[3] "If ever mercury is expected to do any good in cases of suffocation by membrane, it must be made to act promptly. . . . I recommend the oleate, of which ten or twelve drops may be rubbed into the skin along the inside of the forearms or thighs every hour or two hours, . . . or hypodermic injections of corrosive sublimate in one-half or one per cent. solution in distilled water, four or five drops from four to six times a day or more, either by itself or in combination with the extensive use of the oleate, or with calomel internally." On p. 706 of the same it is said: "A baby a year old may take one-half grain (of corrosive sublimate) every day for many days in succession, with very little, if any, intestinal disorder, and with no stomatitis."

And in THE MEDICAL RECORD, May 24, 1884, p. 576: "I do also know that when the constitutional effect of mercury can be obtained speedily, cases of fibrinous tracheobronchitis get well in an unexpected manner. To ac-

[1] Charles Wilson, in Edinburgh Medical Journal, 1856, vol. i., p. 5.
[2] Mackenzie on Diphtheria, p. 63.

[1] Benjamin Rush: Medical Inquiries and Observations, p. 173. Philadelphia, 1805.
[2] Dr. Brouse: Medical News, June 27, 1885, pp. 720, 721. Philadelphia.
[3] Dr. A. Jacobi, in A System of Practical Medicine. By American Authors. Vol. i., p. 705.

complish that it is necessary to give small doses very frequently. Calomel gr. viij. to xij., divided into thirty or forty doses, of which one is taken every half hour, is apt to yield a constitutional effect very soon." He continues: "The actual benefit derived therefrom cannot have been very great, for the mortality from croup has nowhere been encouraging." Treatment short of blood-letting could not be more depressing than this. These enthusiasts need a little calm reflection to lessen their zeal.

The explanation of such wholesale use of mercury is that it is said to be an antifermentative or a germicide.

It is not worth while to reason against the fallacy of mercuric chloride being an antifermentative. When introduced into four pounds of blood, for example, in doses of one-fiftieth of a grain every two hours, providing all is absorbed, it is being constantly eliminated; or, if elimination is interrupted, it acts as an irritant to the alimentary canal, inducing purging or vomiting, often both at the same time. Recently it has been demonstrated by E. Klein and Blythe that corrosive sublimate possesses no more power as a germicide than pure water. Although prostration is one of the great dangers to be dreaded in diphtheria, and the testimony of physicians is a unit against the employment of depressants in the disease, mercury, a powerful depressant, is being used by many prominent physicians with as much fervor as they would use a known specific. Many infer, because salivation does not appear, that if the repeated small doses do no good, they can at least do no harm. Doubtless the fact that it is exceedingly difficult to excite salivation in a young child has led many to believe that mercury can be given to children of all ages in unlimited doses without causing harm. A. Jacobi says:[1] "A baby a year old may take one-half grain of corrosive sublimate every day for many days in succession, with very little, if any intestinal disorder, and with no stomatitis."

Although it does not cause either intestinal disturbance or stomatitis, it does produce great depression and debility.

"The fact that mercury may prostrate and destroy a young child, even though it does not cause salivation, it is to be feared is not sufficienty appreciated, at least by some."[2]

Mr. Colles, of Dublin, says:[3] "No man in the present day requires to be told that mercury never does produce ptyalism or swelling and ulceration of the gums in infants."

Dr. Evanson and Maunsell say:[4] "Mercury does not seem capable of salivating an infant. We have never seen it do so, nor are we aware of any such case being on record. . . . We have never succeeded in salivating a child under three years of age."

Dr. Warren, of Boston, observes:[5] "I have never known an infant to be salivated, notwithstanding I have given, in some instances, large quantities with this view."

Dr. Percival, of Manchester, remarks,[6] that he "repeatedly observed that very large quantities of the unguentum cœruleum may be used in infancy and childhood without affecting the gums, notwithstanding the predisposition to a flux of saliva at a period of life incident to dentition."

It is significant that where mercurial treatment has been pursued throughout in diphtheria, convalescence is always more tedious, and the anæmia of the disease is more persistent; and that where death occurs it is almost always from exhaustion. Even where the larynx has been implicated, the inevitable exhaustion resulting from the mercurial treatment hastens death, even if it has diminished the symptoms of obstruction.

Large doses of mercury, often repeated, powerfully depress the system of the adult, and naturally this depression is more profound in the child. This is shown by the fact that when ptyalism does occur in infants it is more disastrous in its effects on the delicate organism than on that of the adult. In the use of mercury with the small child great caution is necessary. as we have not the symptoms usually so readily induced in the adult, but which do not appear in the infant until so marked that they prove disastrous by throwing the child into excessive prostration, thus giving us a condition to treat quite as serious as the disease itself. I have seen several such cases, and I know that, as a result of the inconsiderate use of mercurials in the treatment of diphtheria, physicians are often called upon to treat the consequence of their want of caution; while they have blindly ascribed the rapidly progressive anæmia, prostration, marasmus and death to the disease alone.

I have seen, in consultation, several cases of diphtheria in which death resulted, and was to be imputed to, the excessive use of mercury rather than to the effects of the disease; yet the instructions I have just quoted had not in any instance been exceeded, nor even equalled.

Let those who believe in the vigorous use of mercury in the treatment of diphtheria read in volume ix. of the "Medico-Chirurg. Trans.," 1818, p. 220, and in Marshall Hall's "Principles of Medicine,"[1] how the illustrious Dr. T. Bateman fell a victim to mercurialization, the symptoms appearing on the ninth day of the mercurial inunction, one drachm of mercurial ointment, by friction, having been used every night.

The report of the Committee of the British Medical Association on the action of mercury on the biliary secretion was that it caused its diminution through its general depressing action on the entire organism. Recently it has been shown that mercury has a powerful destroying action upon the hæmocytes.[2] Yet this drug is now used as a curative agent in diphtheria, without any rational or philosophic explanation of its *modus operandi*.

Dr. F. R. Sturgis, who is an authority on this subject, says:[3] "The chlorides and the iodides are more apt to produce toxic symptoms than other forms." Notwithstanding this, these are the forms used in the treatment of diphtheria. When used with discretion, calomel is undoubtedly a valuable medicine in diphtheria. It probably acts as a derivative and eliminant by its purgative action, by its increasing the activity of many of the secreting and excreting glandular structures of the body, particularly the intestines, and it will be observed everywhere in the writings of the older physicians that calomel only did good in croup when it produced purging, and it stands to reason that in suitable cases occasional purgative doses may be beneficial, while to continue its use so as to induce its constitutional effect is injurious. Children suffering from diphtheria, who have had syphilis, are greatly benefited by the addition of a mercuric salt to the usual remedies found to be useful in diphtheria.

Children with scrofulous enlargement of the lymphatic glands, laboring under diphtheria, do better when a mercurial is judiciously added to the treatment. This is because both of these disorders are benefited by the careful use of mercury. But because such cases are found to do better where mercury is added to the treatment for diphtheria, to rush to the conclusion that all cases will be cured of diphtheria by it is a ridiculous fallacy. Neither bichloride of mercury nor any other mercurial being, in any sense of the word, a specific, and having no possible germicide or antifermentative action, the unsparing and injudicious administration of it,

[1] A System of Practical Medicine. By American Authors. Vol. i., p. 706. 1885.
[2] John Beck, M.D.: Infant Therapeutics, p. 56. New York, 1855.
[3] Abraham Colles, M.D.: Practical Observations on the Venereal Disease and on the Use of Mercury, p. 171, Amer. edit.
[4] Treatise on the Management and Diseases of Children, p. 114, Library Pract. Med., Trans. Mass. Med. Soc., 1848.
[5] View of the Mercurial Practice in Febrile Diseases. Communications by John Warren, M.D., p. 494, Trans. Mass. Med. Soc., 1813, vol. ii.
[6] Thomas Percival, M.D.: Essays, Medical and Philosophical, vol. ii., p. 318.

[1] Marshall Hall: Principles of Medicine, p. 91. London, 1837.
[2] British Medical Journal, July 28, 1885, p. 152.
[3] New York Medical Journal, August 1, 1885, p. 121.

without due comprehension of the indications furnished by the individual case, is only a blind and dangerous empiricism. I have unequivocal and direct evidence of the injurious effects of bichloride of mercury from two intelligent physicians who have had diphtheria, and who both experienced the depressing effects of the drug. They told me that they felt depressed as soon as the mercurial began to have an appreciable action on the intestinal tract, and that there was a feeling of nausea and sinking even preceding this. I may add, that after the discontinuance of the bichloride both patients felt within three hours the strengthening effect of the tincture of iron in full doses, given hourly. As no practitioner would persist in the use of bichloride or any other mercurial salt on himself or another physician after the depressing effect began to be felt, it should not be used thoughtlessly on children who cannot intelligently communicate their sensations, nor even on adults who would not be likely to notice the approaching depression and weakness as soon as a professional patient might, and so ward off a crisis.

That the mercurial treatment is insufficient to control the diphtheritic process is shown by a case recorded[1] of a girl, aged twelve, under treatment for pain and swelling of the joints (rheumatism), with calomel (among other drugs) until salivation occurred. While under this treatment the girl developed "croup," from which she died. Post-mortem examination revealed a layer of fibrine in the larynx, which was continued down the trachea and the lesser ramifications of the bronchial tubes. If it is true that mercurials cure croup, their action in this case should have prevented its development, in a patient under mercurial treatment, to its constitutional effect, when the disease attacked the system. Salivation, in fact, favors the extension of diphtheria; so the depression of the treatment promotes its spread when there is no local indication of its constitutional effect.

In diphtheria life is endangered by the great weakness induced by the malady itself, and I most seriously deprecate the employment of measures which depress the system, and especially of those by whose means we voluntarily bring on a secondary diseased condition, which may prove quite as dangerous as the original malady. These are sufficient reasons for the discontinuance of that free use of the mercurials, which is too often had recourse to without either thought or caution. The too universal extolment of them at the present time has caused an indiscriminate use of them, which brings harm to our patients, and will in the end cause the abandonment of a drug which is of undoubted utility if used as an auxiliary to our treatment, and will bring just opprobrium on our profession for using a remedy which has been over-zealously recommended on no sufficient foundation, and without any criterion to guide us.

At the present, more than at any other time, an accurate knowledge of remedies is obscured by false prophets, who cry, "A cure is found for diphtheria!"—thus setting a fashion, as it were, and the new idea is received and followed blindly.

If every practitioner would think for himself, weigh the results of experience, examine again and again old remedies and new applications of them, but at the same time be searching for new and more efficacious ones, it would be the means of our therapeutics growing in simplicity and precision.

In the absence of a specific for diphtheria we are reduced to the elimination of the poison of the disease; the counteraction, so far as possible, of its effects on the blood and system generally; to limiting the spread of the local morbid process, the prevention of complications, the amelioration of symptoms, the conservation and supporting of the forces of the system, the maintenance of nutrition, sustaining the heart, and, if need be, of stimulating into activity the latent vital forces. It is evident that no one remedy could meet these varied indications of cure; we must therefore depend wholly upon a judicious combination and sequence of means, adapted with judgment to particular cases. Can we eliminate the poison? Before answering this question, we must first know which are the natural channels of elimination of the specific poison of diphtheria? Without doubt these are the mucous membrane of the throat and air-passages, and probably by the intestines, kidneys, skin, and all the emunctories of the body. Prof. Loomis says:[1] "Clinical facts indicate that the infectious element is present in the exhalations and in the excretions, as well as in the exudation itself." Sir Wm. Jenner recommends that the treatment of diphtheria should begin with a purgative, believing that the elimination of the poison is thus made to take place by the intestinal canal.[2] I have noticed when the symptoms of diphtheria have been active from the outset, with considerable soreness of the throat, and with early and marked membranous formation, that if the patient has at once been placed in bed, diaphoresis induced, the bowels gently acted upon, the neck counter-irritated and poultices applied, there is a marked improvement; and that such cases, if judiciously managed, do well, and in nearly every instance make a good recovery; and presumably by rapid elimination of the poison. When, however, the outset of the disease is insidious, the process slow in developing, generally the treatment is less active, the poison is not so early nor so rapidly eliminated, the course is indolent with frequent relapses, and sequelæ are apt to remain.

From carefully weighing these facts, I have come to regard elimination of the poison as the first indication of cure in diphtheria. By this management we promote the expulsion of the morbific matter, and we are able to use, with decided benefit, drugs directed against the disease, such as iron, quinine, etc.; but the use of these drugs from the outset in cases of marked febrile disturbance, without preparatory treatment, seems to aggravate the symptoms and to less thoroughly control the disease. For the purpose of eliminating the poison so far as possible by the throat, intestines, skin, and kidneys, have recourse to mild purgation, simply sufficient to excite the activity of the glands of the intestinal tract, triturated calomel in small doses being the best for this; hot poultices to the neck to excite the activity of the mucous glands of the throat; powdered ipecacuanha co., as a sedative, diaphoretic, diuretic, or the hot foot-bath, according to indications. Of course this plan is not to be adopted indiscriminately, but our treatment must be modelled in accordance with the degree and acuteness of onset of the inflammation, and an accurate estimate of the vital individuality of the patient.

If we study the therapeutic indications from the standpoint of the lesions in the throat, the unaided reparative process of nature, the *modus operandi* of local treatment which may be adopted, and the effect of these on the morbid process, we are led to feel that we can control or at least modify the local manifestations of the disorder. Where several members of a family are successively attacked with diphtheria, and we daily examine the throat, thus inspecting it before the appearance of the exudate, we will observe its mucous membrane become reddened, its secretion diminish, and its surface dry. Besides these changes there is moderate swelling of a part of the mucous membrane, while the rest may appear normal. After the lapse of a few hours, small grayish- or yellowish-white specks appear. If the diphtheritic process progresses uninterruptedly, these spots of membrane coalesce and may more or less completely cover the inflamed surface.

The evidences of advancement of the process, and of its *diphtheritic character*, are to be found in the edges of the patches being thinner than the centre, and shading off imperceptibly into the inflamed mucous membrane,

[1] London Lancet, vol. i, p. 726, 1838–39.

[1] Practical Medicine, p. 672. Wm. Wood & Co., New York, 1884.
[2] W. H. Day: Diseases of Children, p. 351. Philadelphia, 1881.

in being surrounded by a zone of angry-looking inflammation, and in their appearing on the pillars of the fauces.

If now, a reparative process is established, the vascular injection at the immediate edges of the diphtheritic membrane lessens, the patches thicken at their edges, and separate, usually in small portions. This process of repair is due to the effusion of serum, the exudation of mucus, the immigration of pus-corpuscles, and the loosening of the pseudo-membrane by ulceration. The object of local treatment, then, must be to allay inflammation, to re-establish secretion from the glands of the mucous membrane, and to excite suppuration. Counter-irritation to the neck, moist heat externally and internally, by diminishing congestion, re-establishing the natural secretion, and promoting suppuration, closely imitate the unaided method of nature.

Rubefacients are important remedies in the treatment of diphtheria. Turpentine is a rubefacient which acts with great promptitude, which is no small consideration in a disease like diphtheria; this, together with the fact that its use may be continued over a long period, makes it the best of the rubefacients. By producing irritation and congestion of the skin, turpentine lessens the congestion and inflammation of the throat; and the swelling and soreness of the cervical lymphatics are rapidly diminished. Moist heat in the form of *hot* flaxseed-meal poultices, allay the inflammatory process at the margin of the pseudo-membrane, stimulate secretion, promote suppuration, and check the formation of false membrane. Where this has occurred the patches of pseudo-membrane already formed will be seen to be raised from the mucous membrane, and their surface to become wrinkled and uneven, and finally they become detached.

When moist heat is thoroughly used, the secretion in the throat and pharynx is less tenacious, it is more readily removed, either by expectoration or by being washed away by swallowing, and by medicine; there is therefore less need for spraying, etc.

Moist heat promotes resolution of the inflammation in the cervical lymphatics, softening these, lessening the soreness, and thereby giving great comfort.

In faucial, tonsillar, and pharyngeal diphtheria the whole neck, from the episternal notch to the lobes of the ears, is enveloped in a hot poultice. This must be covered with two thicknesses of flannel, and an outer covering of oiled silk. The poultice should be renewed every half hour or every hour. Where poultices are objectionable or are too troublesome, a much neater and very effectual mode of applying moist heat, consists in the use of spongio-piline frequently wrung out of hot water, tied around the neck, and covered with flannel and oiled silk.

To be convinced of the beneficial effects of poultices, very hot and frequently renewed, witness their value in wound diphtheria, where the process has resisted every other mode of treatment. There is nothing that promotes exfoliation of the membrane and checks spreading of the inflammation as a poultice does. Were it possible to apply a poultice to the tonsils and pharynx, we would quickly see a subsidence of the diphtheritic inflammation and a separation of the exudate. We imitate the action of poultices when we use steam inhalations; the physiological action and the beneficial therapeutic effect being much the same. It is the steam, and *not* the medicament used, that benefits the patient. A fluid in which diphtheritic membrane is soluble does not possess the power of dissolving that membrane when it remains attached to the vital tissues; hence trypsin and other agents recommended for this purpose are valueless as a solvent of the diphtheritic exudate *in the throat and air-passages*. For vaporization, nothing is more satisfactory in my experience than lime-water, two parts, to alcohol one part. The most convenient and safest apparatus for producing steam, and the one least likely to alarm a child, is the ordinary iron or tin croup-kettle with an alcohol flame, and a piece of stiff rubber-tubing extending from the spout of the kettle to the patient. At first the kettle should be kept at some distance from the child, and gradually brought nearer as it becomes accustomed to it. If fear and dread of this treatment cannot be overcome by tact, it may be resorted to only during sleep; in which case great care should be taken to have the apparatus removed if the child begins to awaken, that it may not be frightened, and thus interfere with future rest and management.

During the use of the steam the neck and chest of the child, should be covered with oiled-silk, lined with canton-flannel, so that its clothing may not be dampened. Steam should be used only for ten or fifteen minutes at a time, and at frequent intervals, shortened when the inflammatory process is excessive. Continuous use of steam would weaken the child, make him restless and cause him to dread it, but if used at intervals it is grateful to him, does not depress him, and is soothing in its effects.

Mild purgatives, diaphoretics, diuretics, counter-irritants, with moist heat externally and internally, if used judiciously and with discrimination, are beneficial at the very outset of the disease, as eliminants of the poison, as derivatives from the seat of disease, as evacuants of morbid secretions and excessive tissue waste, in checking the spread of the specific inflammation, in lessening the formation of false membrane, in exciting the activity of the secreting glands at the seat of the disease, and in lessening the tendency to involvement of the larynx.

During this disease more nitrogenous food should be taken and absorbed, and the vicariously-eliminating urea structures, as the skin and intestinal canal, should be maintained moderately active; but profuse sweating and purging, like every other excessive evacuation, is harmful. If the throat is much inflamed, the exudation firmly adherent, showing no tendency to exfoliate, even after the use of the above means, pilocarpine may be given. If there is undue exhaustion, pilocarpine must be used with caution.

If the child is very young, has recently had pneumonia, measles, or bronchial catarrh, if it is rachitic or has valvular disease of the heart, pilocarpine is almost an unsafe drug.

After the use of pilocarpine, the vascularity of the throat is reduced, the normal secretion is re-established, and the membranous exudate appears less tenacious; its extension seems to be arrested by the circumference of the patches presenting a less livid appearance and terminating more abruptly in the healthy mucous membrane, the patches at their edges begin to give evidence of commencing separation. In addition to its action on the throat, pilocarpine promotes the elimination of the poison.

The next indication is to counteract the effects of the poison on the blood, toward which purpose pure air, sunlight, and quinine play active parts.

The only known agent that is inimical to germ life, that is a perfect disinfectant, and is not only harmless to the patient, but is beneficial both in health and in disease, is sunlight. No disease-germ can long retain its vitality when exposed to the sun's rays. An important requisite in diphtheria, therefore, is to have the patient in a southeast room, no hangings at the windows, and the bed so placed as to receive the unobstructed rays of the sun from morning to night. Where this is done, the intense and persistent anæmia so common after diphtheria is not so marked, and convalescence is more satisfactory and progresses without interruption.

The sick-room should be further purified by having roll-sulphur burned in it at least three times in the twenty-four hours. The sulphurous acid gas thus liberated and inhaled by the patient has a decidedly beneficial local effect.

Another accessory is fresh air, which must be obtained at intervals during the day, moving the bed of the patient, if necessary, to keep him from the currents of air.

If full health and richness of the vital fluid render a person less liable to contract diphtheria during its prevalence, it is natural that iron, quinine, and other potent tonics, render the blood of the patient less favorable to the action of the morbific agent.

If the tendency to death is by asthenia, a stimulant-tonic treatment is urgently demanded, and depressants, except to meet definite indications, are to be avoided.

Dr. Thomas Heslop, of Birmingham, in 1858 introduced the tincture of iron as a remedy for diphtheria, and his words of caution should be considered at the present time: "My great fear is, that this method of treatment will be extravagantly lauded, that it will be called by the ignorant specific, and that on the occurrence of fatal cases under its use, as is inevitable in so virulent a disorder, it will be consigned to the limbo where so many other therapeutical abortions have been thrown."[1]

Dr. Heslop's fear was realized, and it was said because patients died that iron as a remedy against diphtheria had been overestimated. Death was the result of neglecting other indications, and from giving too small and too infrequent doses of iron.

Herr Aubrun, of Paris, in 1860, administered to a child twenty-one months old, fifteen drops of tincture of the chloride of iron every ten minutes during the day and every fifteen minutes at night. The child had diphtheritic laryngitis, with pulmonic consolidation. Tracheotomy was performed; the iron in these doses was continued, and ultimately recovery took place. Aubrun believes that recovery was largely due to the use of iron in such heroic doses.

Robert Druitt, in 1861, administered two drachms of tincture sesquichloride of iron every two hours for twenty-four hours, and three fluid ounces in five days. The record of the case shows that this quantity did good, and as Dr. Druitt remarks,[2] "it was evident that these doses did good, and it was probable that smaller ones might have failed."

One of the physicians of Middlesex Hospital gave one and a half ounces tincture of iron in twelve hours.[3]

Generally iron has not been given in sufficiently large doses to get the desired effect, nor have the doses been graduated by the form of the disease. Attendant upon the action of the diphtheritic virus is a decline in that nervous control which regulates the functions in health.

Tincture of the chloride of iron, in diphtheria as in erysipelas, increases the vital contractility of the blood-vessels, probably by its stimulant-tonic effect on the nerve and vascular systems, thereby preventing the spread of the disease-process.

To get the physiological effect of iron it must be given in full doses, in accordance with the type of the disease. Where there is marked sepsis and tendency to capillary hemorrhages, the dose should be larger than in a case of a less septic and more marked inflammatory character. If we are to obtain the decided effects of the drug in a case of septic diphtheria, at least one drachm of the tincture should be administered every hour, to a child two to five years old. We have given two drachms every half hour for forty-eight hours, or twelve ounces in two days, to a boy eight years old, with manifest good, and with no disturbance of the stomach. Indeed, there is no rule as to quantity. Instead of giving directions for definite doses, I should say be guided by the controlling influence of the drug on the disease-process. Give it *ad libitum* so long as the inflammatory and exudative process is spreading; as you would in erysipelas, until you see the dilated and dilating vessels contract, and the advancing redness brought to a pause. Iron is best given with an equal portion of glycerine. Chlorate of potass with the iron mixture enhances its efficacy. This combination was used in England almost immediately after the introduction of iron by Dr. Heslop.

[1] Thomas P. Heslop, M.D.: On Diphtheria, in Medical Times and Gazette, May 29, 1858, p. 554.
[2] British Medical Journal, February 23, 1861, p. 208.
[3] British Medical Journal, vol. i., 1861, p. 208.

The Report of the *Lancet* Sanitary Commission on Diphtheria,[1] in 1859, said: "Of the many internal remedies which have been advised, we do not know of any on which so much reliance can be placed as on the tincture of sesquichloride of iron in combination with the chlorate of potass." A valuable adjunct is quinine, which should be given in small tonic doses, where it does not irritate the stomach, and where it can be given without the child's tasting it. It can generally be administered in food or jelly to the youngest child in gelatin-coated pills of a fraction of a grain each. In many of the cases of diphtheria in New York alcoholic stimulants take first rank in the treatment. I do believe, however, from a very varied experience in dispensary, private, and consultation practice, that stimulants are too generally used at the *outset* of this disease. Unless there is marked sepsis, I do not find alcohol necessary during the first days of the disease, nor until the symptoms, particularly the pulse, give some indication of its need. As to quantity, we must be guided by the effect and the temperament of the patient. Some children with diphtheria bear surprising doses of whiskey or brandy with great benefit. Twenty or thirty drops every hour to a child one year old to begin with, increasing the quantity and the frequency according to the effect on the disease and the child. We must stimulate into activity the reserve nerve force whenever indicated by the failing strength, to preserve the powers of the system, and to maintain the functions of the important organs at an equable standard.

Nutrition must be carried to the highest point by means of concentrated nourishment, and, if need be, by rectal feeding. Bear in mind that the fever of sepsis indicates failing powers and excessive waste, and that it is relieved by maximum doses of iron with moderate doses of quinine, or, if very high, with antipyrin.

Local treatment.—This certainly is not curative in its effect, and the most that can be said for it is that by its local effect it may prevent the spread of the disease, and even this is questionable, and not so certain in its action as constitutional remedies intelligently and vigorously administered.

There is one insurmountable obstacle to the successful local application of a drug of known potency, even if we possessed one. It is only intelligent, older children who will submit to anything like thorough applications to the throat. Even with them, if well and frequently done, it will not long be borne without protests which end in a desperate struggle with every attempt. The exhaustion following such treatment has led me to abandon local applications, except in rare cases, and then only at long intervals.

When from the local anatomical changes, or from functional impairment of the larynx, we have reason to apprehend croup, the treatment should be modified accordingly. When we see bands of pseudo-membrane forming on the posterior wall of the pharynx, and descending down beyond our view, we have reason to dread invasion of the larynx. We know that a secretion on a mucous surface tends to macerate the false membrane of diphtheria, and promotes the resolution of the inflammatory action. The exudate which results in the formation of the false membrane is usually at first more fluid, less concrete than it is after its retention on the mucous surface, where it finally forms a distinct layer. For this reason an emetic should occasionally be administered when there is a disposition to extension into the air-passages, that it may be removed before it has become concrete. An emetic subdues the congestion in the larynx and stimulates the glandular activity, thus tending to prevent the formation and promote the removal of an inflammatory product. The employment of emetics is imperative in very young children who cannot expectorate, and in all cases where there is much accumulation

[1] London Lancet, February 12, 1859, p. 171.

of mucus, and children will not gargle—if there is a catarrh of the larynx, or much croup; if the voice is altered, or there is much inflammatory swelling in the fauces; if there is a snoring sound during sleep, even though there may be no other sign of laryngeal disturbance. Emetics must be used only occasionally, taking great care not to exhaust the child.

Ipecac, in the early stages of laryngeal invasion, is the best emetic, because it counteracts the inflammatory tendency better than any other of its class, and it is perfectly safe in judicious hands. At this stage steam should be frequently used. If it annoys the child, small doses of opiates may be given to allay irritability and induce sleep, so as to enable us to have recourse to steam. Restlessness, fretfulness, and loss of sleep exhaust the strength, lessen the appetite, promote the spread of the local lesion, and increase the danger of laryngeal invasion. In any nervous, restless, and fretful child opiates should be used, if necessary, to procure sufficient, uninterrupted sleep.

When a diphtheria is very persistent, or even after its entire disappearance from the throat it is constantly reappearing, the nasal passages should be examined. Many of the cases of sudden, unexpected death, after the complete disappearance of all evidence of the disease from the throat, are due to an unrecognized diphtheria lurking in the nasal passages, thus silently undermining the vital powers and ending in heart-failure—a sequence no less strange than it would be if the child were allowed to go about with an active faucial and tonsillar diphtheria. When recovery is protracted, or there are repeated relapses, even though the treatment is not suspended, always suspect and examine the nares. If there is slight illness, with injection of one eye, examine the corresponding side of the nose. When there is swelling on one side of the neck only, or the swelling on the two sides is unequal, being greater on the side where there is the least disease in the throat, you will be quite certain to find previously concealed patches in the nose or on the posterior pharyngeal wall behind the pillars of the fauces on the side corresponding to the greater swelling of the lymphatic glands.

When there is great swelling of the cervical lymphatics on both sides, with comparatively slight throat diphtheria, we have reason to investigate the nasal anfractuosities. When the pulse continues rapid, or unnaturally slow and irregular, if there is great prostration, anorexia, and nausea, examine the nares. In a word, then, it is always incumbent upon us, when diphtheria is prevalent, to examine with care the nasal mucous membrane of every sick child. Do not wait for visible manifestations, as the disease may develop here to a dangerous degree without warning and without symptoms, until the throat is invaded. I had a child brought to my office last summer from a summer hotel for what was supposed to be mumps, it proved to be a bad nasal diphtheria. Nasal diphtheria is almost always insidious in its outset, often for a long time remains indolent, then giving rise to excessive diphtheritic infection, the *recognized* disease being very sudden in its attack. The gradual extension of a nasal diphtheria to the throat sometimes causes but little soreness, and the first warning of its existence is from the occurrence of croup (see p. 621).

We are especially liable to find nasal diphtheria in children with diphtheritic patches about the lips, or who have cutaneous diphtheria.

Nasal diphtheria, if recognized in its beginning, in a child of average health is not very dangerous. With prompt, painstaking treatment, it can usually be kept in check and subdued without serious symptoms. In nursing infants, with much swelling of the mucous membrane, there is great danger, owing to their inability to nurse, that starvation or suffocation may take place. Management, however, on the part of an experienced and competent physician will triumph over these difficulties. Thorough and frequent disinfection is very necessary here. For this lime-water, equal parts of it and saturated solution of chlorate of potash; lime-water, with ten or fifteen drops of carbolic acid to the ounce; and salt water, with alcohol, are good. There is nothing better than the last. A weak solution of salt, with a little alcohol in it, increasing the strength gradually, taking care not to have it irritate, cleanses and disinfects thoroughly, *if thoroughly done*. After this, the application, with a feather or camel's-hair brush, of a ten per cent. ointment of iodoform is one of the best that I have used.

Prognosis.—If the outset of the disease is active, and it is recognized and treated early, the prognosis is good. With a sluggish inception, late recognition and treatment, the prognosis is questionable. In a child who has recently had measles or scarlet fever, or who is recovering from whooping-cough and has catarrh of the air-passages, there is danger of complications and of early exhaustion. If any other epidemic disease which the child has not had is prevalent at the time, and he has been or will be exposed to it, the prognosis is serious.

The existence of scrofula makes the prognosis more grave. All of these call for a stimulating and supporting treatment throughout the disease. When the patches of pseudo-membrane are thinner at the edges than at the centre, and are surrounded by a red border of angry-looking inflammation, we have more cause to dread the disease spreading than when the membranous patch is thick at its edges, with a tendency to become circumscribed. Loosening and signs of detachment of the patch at its edges, and puckering of the same, are indications of an arrest of the disease, and of a beginning reparative process.

When there is diphtheria in a family where there are several children, and they cannot be removed, every child should be daily submitted to an examination of the lymphatics in the submaxillary region and the fauces.

Children who are not feeling well will not complain, and even when questioned will say that they are not sick, from the fear of an examination of the throat and of treatment. They should be kept as much as possible in the open air, and given iron, quinine, and the most nourishing plain food. No case of diphtheria, however slight it apparently may be, even if it be limited to a single patch of membrane, can be neglected but at the risk of life. I know that in this statement I make myself liable to the imputation of being an alarmist, but a sufficient experience justifies the declaration.

Dr. A. Jacobi,[1] on "Prognosis of Diphtheria," says: "But the physician will often enough be deceived, and more frequently, too, in mild than in bad cases." The mild case, through inattention and want of conservation of strength, and from exposure and catarrhal complications, is allowed to become a severe one. There is nothing mysterious about sudden death in the majority of diphtheria patients, nor in the mild cases developing diphtheritic laryngitis. True, we will occasionally meet a case of diphtheria where, owing to scrofulous glands or other constitutional peculiarity, the poison, despite careful treatment, will remain a long time stowed away in the system, liable to be at any moment discharged into the blood; but the observant practitioner is rarely deceived by such a case.

If, after the disappearance of the local lesions, fever, cachexia, and glandular swelling persist, we have reason to fear the reappearance of the exudate; and the continuance of any one of these, or of a small thready pulse, should be sufficient to make us vigilant. Progressive loss of appetite during convalescence is a serious symptom, and when accompanied by vomiting we have reason to apprehend a lesion of the pneumogastric nerve. Morphia, hypodermatically, is one of our best remedies for controlling this vomiting. Sleep, at all times necessary, is, at the latter part of this disease, especially important, and it is now that opiates are well

[1] Jacobi: On Diphtheria, p. 149. New York: William Wood & Co., 1880.

borne. When there is nocturnal delirium, with considerable elevation of temperature, quinine and iron, the latter in maximum doses, are to be given, and they control both symptoms.

In nursing-children iron and quinine should be given to the mother as well as to the child. In bottle-fed children the saccharated oxide of iron may be given in the milk without danger of disgusting the child; twenty grains may be given in this way every two or three hours. Children with diminished appetite and digestive powers may be given pills of raw beef and pepsin. Pepsin should be freely used in every case where there is much prostration. Use peptonized food where there is much depression. When there is nausea give peptonized foods by the rectum. Every attention must be given to keep up the nutrition and strength, and to prevent any unnecessary further withdrawal of remaining vital power.

These methods of treatment lend mutual aid to one another; any one is insufficient without the other; and cases will be met with where a modification of this system-management will be necessary. No written plan of treatment should be allowed to supersede the physician's judgment. To know the natural history of diphtheria, to have a knowledge of indications, and a discriminating judgment, is to possess ourselves of the beacons by which we are to be guided in the treatment of this disease.

THE GALVANIC CURRENT IN CHRONIC PELVIC CELLULITIS.

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While electricity as a therapeutic agent undoubtedly finds its widest field in neurological cases, yet it is by no means to be restricted to these conditions. In every special department of medicine it must at times enter as an important factor, and if both general practitioner and specialist would keep abreast the current, they must recognize this fact. Ophthalmology, laryngology, dermatology, and obstetrics even, own its value, but it is in gynecology that its greatest efficacy lies.

I have for years held that it should occupy a far higher place in the armamentarium of the gynecologist than it has yet occupied, and have occasionally given such testimony as I could concerning its efficacy in the disorders of menstruation, in super- and sub-involution of the uterus, in uterine morbid growths, and in certain ovarian disorders. Until gynecological experts more generally, however, give the subject their personal attention, make themselves familiar with the physics and physiology of electricity, study the differential indications for its use, and finally supplement theoretical knowledge by practical work, the popularization of this invaluable remedy for the diseases of women will be slow.

In the sequelæ of pelvic cellulitis especially, the application of the galvanic current is not infrequently followed by the most satisfactory results. For the absorption of old exudations in other parts of the body, this form of electricity has long been known to be most efficacious, but only within a comparatively recent period has it been tested in the thickening and infiltration resulting from inflammation of the pelvic cellular tissue. The negative pole, consisting of a metal ball, or in some cases, better still, of a concave metal clasp, is to be used internally and directly to the part affected, while the positive is to be applied externally. If the metal electrode is applied without the intervention of a sponge or chamois covering, care should be taken not to use currents sufficiently strong to produce eschars. This mishap may occur even without the knowledge of the patient at the time, and in the beginning it is, perhaps, safer to use a covered electrode. I have seen this treatment, judiciously and persistently carried out, result not only in the absorption of large pelvic deposits, but in the cure of the most severe and obstinate sciatica and in the restoration of power to partially paralyzed limbs. In such cases both sciatica and paralysis are caused undoubtedly by pressure of the exudations upon the pelvic floor, and can be relieved only through the dissipation of the morbid products.

From among a number of cases I select the following as illustrative, in a very striking manner, of the foregoing remarks:

In October, 1884, Mrs. S——, aged thirty-three, came to me complaining of a multitude of symptoms. She could walk only with difficulty and for short distances. The appetite was poor and constipation excessive, associated with a constant pain in the basilar region as well as in the lower portion of the spine, while a constant "burning and pressure" in the uterine region contributed to make her life quite wretched. In addition to all this, she suffered from dysmenorrhœa and menorrhagia and very severely from sciatica.

Upon suggesting to her the probability that local causes prevailed, and that local treatment was called for in her case, she refused to entertain the idea, saying that she had for a long time submitted to local treatment, and, as she believed, with evil results rather than good.

At all events she was now suffering more than ever before. All that she wished for or would consent to receive were some general applications of electricity, in the hope that some of its constitutional tonic effects might become manifest in her case. She came to me irregularly, as suited her caprice, for a number of months, and was treated by both forms of dynamic as well as by static electricity. She received some benefit as to her appetite, and in lessened pain along the spine and back of the head. The objective evidences of improvement also were but slight, and were seen only in a somewhat easier movement of the limbs. Through the confidence begotten of these inconsiderable signs of improvement, she finally consented to an examination. I found the neck of the uterus crowded somewhat backward and to the left side, while the left half of the os uteri was almost completely obliterated.

The enlarged portion was harder than the surrounding tissue, but not acutely sensitive to moderate pressure. Pressure along the base of the swelling and posterior to the os caused greater pain. My idea in making this examination was, that it would be preliminary simply to directing her to some competent specialist in diseases of women, but when I discovered what seemed to me to be extensive exudation in the connective-tissue, I determined to submit her to persistent localized galvanization. For nearly a month the patient came every day, with the exception of Sundays, and subsequently visited me about every other day for three months. The applications were made directly to the diseased part, and when menstruation appeared some three weeks after the inauguration of the local treatment, the flow was not only markedly less in quantity, but attended by a very considerable decrease of pain. In a few weeks the distress along the sciatic nerve entirely disappeared, and the progression toward a fair condition of health was uninterrupted until she was discharged as cured, after having received fifty-six local applications of the galvanic current. Under the absorptive influence of the current the inflammatory exudation gradually disappeared, until in the end the finger could be swept entirely around the neck at its juncture with the body of the uterus. In the recital of a case of this character the question very naturally arises, What are the points aiding in the diagnosis aside from those already detailed? For if this were a case of chronic parametritic exudation, as there is every reason to believe, it must be of exceeding interest to every practitioner, general or special, who has to deal with female diseases. As obtained from the patient when I first discovered the character of the local trouble, her previous history is as follows: About two years before I saw her, she aborted at the third month, suffering considerable pain, but within a fortnight regarded herself as "quite

smart." At this time she took a ride of several miles over a rough country road, and when she reached home was very tired and chilly. During the night she had considerable fever, with sharp, local pains.

From that time onward she suffered almost constantly from dull pains high up in the vagina and through the lower part of the abdomen. Her menstrual flow had always been perfectly normal, but now it suddenly became profuse and painful, and continued so for two years or more until she began the local galvanic treatment. Especially suggestive was the readiness with which the sciatic neuralgia disappeared under applications directed to the enlargement, clearly indicating that the cause of the sciatica, as well as of the incomplete paraplegia, was the pressure of the parametritic exudation on the pelvic floor.

THE HEART—ITS POSITION AND MURMURS.[1]

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In order to obtain a clear conception of, and to readily recognize the various cardiac murmurs, a thorough knowledge both of the exact position of the organ and of the mechanico-physiological laws which govern it are indispensable. This is especially true in regard to those murmurs which are located at the mitral orifice when there is no organic lesion of the valve segments.

The etiology of murmurs of this class has been in doubt for a long time, and has given rise to an endless amount of discussion *pro et con.* It is the purpose of this paper to attempt to throw some light on this subject.

If, as usually is the case, the anatomical position of the heart is taken from frozen sections, it will appear upon a lower plane than that which it actually occupies during life, unless an allowance is made for the sinking which occurs with all the viscera, and especially of the thorax, after death. During life, too, the heart cavities and great vessels are distended with blood, which naturally causes the viscus to occupy a higher position in the chest than would be the case under other circumstances.

During life, therefore, the heart may be said to occupy a triple oblique position in the chest, or one corresponding to a line drawn from right to left, from above downward and from behind forward.

The base will correspond to a line drawn across the sternum from the first intercostal space of the left side to the second intercostal space of the right side, and its apex will be found at the fifth intercostal space of the left side, three and one-half inches from the median line.

The left side of the heart is the most posterior; this is especially true of the left auricle, which also is the most inferior portion of the organ, lying as it does adjacent to the eighth dorsal vertebra, or deep down between the diaphragm and the spinal column.

As a result of this posterior and inferior position of the left auricle, the current of blood passing from it into the left ventricle naturally flows from behind forward from right to left, and slightly from below upward. Or it corresponds to a line drawn from behind through the eighth dorsal vertebra, through the chest, and coming out in front at the junction of the fourth costal cartilage and its corresponding rib. This line for convenience is called the left auriculo-ventricular axis. From this description it is readily seen that the biscuspid valve is situated well behind on this axis.

All the murmurs, therefore, that occur at the left auriculo-ventricular orifice are produced and transmitted by the current of blood passing in one of the directions of this axis.

Organic lesions of the bicuspid orifice are pretty thoroughly understood, but that condition in which positive evidence of mitral insufficiency is obtained upon physical examination during life and the necropsy reveals a perfectly normal and competent valve, have not been so satisfactorily discussed.

Murmurs, the result of organic lesions, are divisible into two classes—those due to obstruction at the orifice and those due to an incompetency of the valve.

The causes of the organic obstructive murmur are acute endocarditis, with roughening of the valve by outgrowing vegetations, congenital malformations, chronic endocarditis, with or without calcareous depositions, which narrow the orifice, and all of which prevent a free egress of blood from the auricle.

The etiology of the regurgitant murmur at the mitral orifice from organic causes are acute and chronic endocarditis, with their resulting retraction of the valve segments; rupture of a segment of the valve, or rupture of a chordæ tendinæ, and acute and chronic dilatation of the left ventricle.

With organic narrowing of the bicuspid orifice a murmur is produced in the auriculo-ventricular axis by the obstruction to the normal current of blood. It is called a presystolic murmur. This is true so far as the ventricle is involved, but in reality it is a systolic murmur of the auricle, and occurs at the height of the auricular contraction. This murmur is heard with greatest intensity at the point where the auriculo-ventricular axis strikes the anterior surface of the chest-wall, or at the junction of the fourth costal cartilage with its rib. It is high-pitched, and is practically not transmitted, being heard only over the limited precordial area. It is usually of short duration, but may be somewhat prolonged if the obstruction be very great.

With an organic incompetency of the bicuspid valve a murmur is produced by the blood being forced back from the left ventricle into the auricle against the normal current. It is distinctly heard at the apex, is transmitted to the left, often lost at the axillary line, but is heard with equal intensity behind at the inferior border of the seventh dorsal vertebra, or between this point and the inferior angle of the left scapula.

According to the ordinary law of production and transmission of cardiac murmurs, this murmur should be heard behind only; but occurring as the result of the ventricular contraction, when the heart becomes as it were a solid body and strikes against the bony chest-wall, which is also a dense body; they, together, obey the general law of transmission of sound by dense bodies, and bring the sound distinctly to the anterior surface of the chest.

At one time we were taught that a systolic murmur at the apex, if transmitted to the left and heard behind, always indicated an organic lesion. This, however, does not always hold true at the mortuary, and still more infrequently at the bedside and in the clinic room.

A functional obstructive murmur of the mitral orifice is often heard in cases where there is considerable aortic regurgitation, the regurgitated blood fills the lower portion of the ventricular cavity, floats the inferior bicuspid segment too quickly up against the incoming blood from the auricle, and produces an obstruction which gives rise to a quick, sharp, and decided obstructive mitral murmur.

It is differentiated from an organic murmur at this valve by its disappearance when the heart is stimulated, and the aortic regurgitation is diminished, or in part compensated for by the prolonged systolic act and diminished diastolic pause.

The functional regurgitant murmur at the mitral orifice is the one of greatest importance, on account of its frequent occurrence, and because it is so often mistaken for a sound due to a positive organic change.

This has been explained by a powerful contraction of the left ventricular wall, causing an over-closure and a forcible sliding of the valve segments upon one another, and thus producing the sound; but while this might hold

[1] The substance of this paper was read at a meeting of the Clinical Society of the New York Post-Graduate Medical School and Hospital, March 7, 1885.

true in a few instances, it is not sustained, in the majority of cases, by the necropsy findings.

To have friction enough to produce so loud a sound would necessitate a roughening of the valve, and would lead to a positive thickening of the leaflets.

This, however, is not the case; for at the necropsy the valves are found perfectly smooth, thin, and absolutely free from any lesion.

The physical signs also disprove this theory. For a murmur produced by too tight closure would not give rise to any regurgitation of blood at this orifice, and consequently there would be no distinct murmur heard behind. A sound heard at the apex and after the first sound, not transmitted nor heard behind, might be attributable to such a condition.

Those cases in which a positive murmur is heard in front over the apex or mitral indirect area, transmitted to the left, and heard with equal intensity behind, near the seventh dorsal vertebra, or between it and the inferior angle of the left scapula, and where the necropsy reveals no organic lesion in the segments of the bicuspid valve, and no dilatation of the left ventricle, but in which the gross appearances of the valve and of the heart itself are normal, deserve special attention.

If we stop for a moment and consider the anatomico-physiological mechanism of the heart the explanation is easy. As is well known the ventricular wall is composed of seven distinct layers of muscle-fibres, or for simplicity they may be considered as four. We have, connected with these layers, two sets of papillary muscles, one springing from the anterior, and the other from the posterior wall of the ventricle, to which the bicuspid segments are guyed by the chordæ tendineæ. When everything works in unison the two segments of the valve float toward the auricular cavity, and their margins are brought together at a given point, and held there by the equal and synchronous contraction of the two sets of papillary muscles and the tension of their chordæ tendineæ. In this way the auriculo-ventricular orifice is perfectly closed and regurgitation absolutely prevented.

If for any reason the innervation of the heart is unequally distributed to the different layers of muscles, or the muscular layers become unequally nourished, their unity of contraction is disturbed, and instead of this perfection of action just described, one set or layer of muscles contracts more forcibly or more quickly than the other, and the papillary muscles shorten irregularly and unevenly. As a result, when the ventricle contracts, one segment or the other fails to stop at just the exact point to meet its opposite, but is forced on into the auricular cavity, while its opposing fellow-segment is drawn more completely into the ventricular cavity. Consequently, instead of a complete closure of the orifice, an actual gap or insufficiency occurs, just as perfectly as if a piece of the valve was wanting, a positive escape of blood from the ventricular to the auricular cavity takes place, which of necessity gives rise to all the physical signs of an organic insufficiency with regurgitation. The temporary results are the same as if there was a positive and irreparable defect. The rational signs also are the same in both instances.

Organic and functional insufficiency at this orifice can easily be differentiated during life, not by their rational or physical signs, however, but by an appropriate plan of treatment. If the cause of the former be a deficient innervation, by giving such remedies as will restore the nerve power the signs and symptoms will be found to quickly disappear, all regurgitation be prevented, and the patient freed from all the unpleasant symptoms. When due to deficient nutrition, with a lack of uneven, or an innervation and irregular muscular action, true cardiac stimulation will cause a like result.

If, on the other hand, the physical signs are due to positive defects in the valve, the same line of treatment will often decidedly improve the condition of the patient, but will not cause a disappearance of the physical signs. It may shorten the duration of the murmur, but the abnormal sound will be more intense and more easily and accurately recognized.

By a true cardiac stimulant is meant a remedy which prolongs and increases the force of the systolic act, and at the same time reduces the number of pulsations per minute and shortens the diastolic period. If, however, the heart is running very rapidly, slowing of its action will cause both the systolic and diastolic act to be lengthened, but the total diastolic pause will be shortened, and at the same time the inherent force of each contraction will be increased.

The medicinal agents which accomplish this result most effectually are opium and its alkaloids, ammonia and its salts, and alcohol, all of which have this tendency to prolong and increase the force of the systolic act and improve the effectiveness of the diastolic pause. At the same time they only contract the arterioles to a slight extent, which in turn permits the largest possible volume of blood to pass through the coronary arteries and cardiac capillaries in a given space of time, and in this way raises the nutrition of the organ to the highest degree attainable. To these may be added nux vomica and belladonna, or their alkaloids, on account of their stimulating effect upon the nervous mechanism of the heart.

Digitalis or its alkaloids is not a true cardiac stimulant in the physiological sense of the word, for it does not prolong the systolic act, nor is there sufficient proof yet advanced to sustain the theory that it increases the force of the systolic contraction. True it modifies the rapidity of the heart's action, which in all probability is due to the high arterial tension, which, in turn, necessarily calls for increased work on the part of the heart, and it slows down to try and overcome the increased resistance.

This high arterial tension and rapid circulatory current is what physiologists teach us retards nutrition, the very thing to be prevented if a compensatory hypertrophy or increased nutrition of the cardiac muscles is required.

The starvation of the heart by the high arterial tension, and the increased amount of work upon a deficient nutrition, appears to explain the true mechanism of the so-called accumulative action of the digitalis.

In mitral incompetency a little good would result from the shortened systolic act, but it is a question whether the good is not more than overbalanced by the decreased cardiac nutrition which is produced by this drug.

In lesions of the aortic orifice, and especially in aortic regurgitation, no one will question the inadvisability of digitalis.

Convallaria, like fox-glove, acts upon the heart indirectly through the vaso-motor system, and its influence in relaxing the arterioles removes the pressure from the heart and apparently increases its force.

Whatever line of treatment is adopted, rest, abstinence from all excitement, and from alcohol, except in medicinal doses, should be the rule. The bitter tonics, and especially some iron preparation, should not be omitted.

102 East Thirty-first Street.

New Journals.—We have received the first number of *La Normandie Médicale*, a new bi-weekly medical journal published in Rouen, France. Its aim is to unite more closely the physicians of Normandy in a spirit of fellowship, and to advance their common interests, presenting them also with the opportunity to chronicle the cases of interest occurring in their daily practice. Another new periodical is the *Gazette de Gynécologie*, published monthly in Paris. In the second number the editor, Dr. P. Ménière, announces with pardonable pride that the success of his undertaking is already assured, and to judge from the contents of the first two numbers this success would seem not to be undeserved.

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GEORGE F. SHRADY, A.M., M.D., EDITOR.

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A NEW THEORY OF PYREXIA.

THE development and regulation of animal heat are among the most interesting of vital phenomena, and the perturbations of this process, as illustrated in fever and in the subnormal temperatures of the insane, are of the deepest import to the physician. While we do not yet know the intimate pathology of fever, our knowledge of its phenomena, of the conditions attending it, is vastly greater, and our conceptions of its nature much more clear and satisfactory than was the case even a decade ago. In fever there is relatively an increase in the production of heat, and an increase in its radiation. The amount of carbonic acid gas and of urea excreted is increased. This increase in heat has been thought to be due simply to an increase in the metabolism or disintegration of tissue, and some investigators have brought forward considerable evidence to show that such increase of chemical change is due to the nervous system letting go its hold on the metabolic process; that there is, in other words, paralysis of a certain inhibitory thermic centre. But it is not possible, according to some authorities, to explain the great production and loss of heat occurring in fever by the fact of an increased chemical activity.

Dr. W. M. Ord, in his presidential address before the London Medical Society, offers a further explanation, which is striking and ingenious. It is generally admitted that in the process of building up the complex tissues from the simpler food products there is a loss of heat, *i.e.*, it is rendered latent. This view is strengthened by certain experiments of Dr. Ord upon the growth of plants. In fever this constructive process is disturbed, heat is not locked up as it should be, but continues kinetic, and goes to join the heat produced by excessive tissue combustion. There is then in fever, through disturbed nervous influence, interference both in the constructive and destructive metabolic processes.

This theory is characterized by Dr. Broadbent as "one of those flashes of insight which at once lights up the whole subject, and needs no more proof than does a poem."

The theory would be much strengthened, in our opinion, if Dr. Ord could show that the increased amounts of urea and its allies excreted in fever came in disproportional amount from the food and "circulating albumin." For if there is excess of heat from deficiency in assimilation of food, evidence of this would appear in the excretions.

In this connection a letter from Dr. Charles A. Rayne to *The Lancet* is of interest: "One day last week, during an ascent of one of the lake mountains, nearly three thousand feet in height, I made the following observation. When half way up, and during the ascent of a very steep and rugged bit, I took my temperature in the mouth very carefully. It was 95.5°, though I was feeling very hot at the time, and respiration was largely increased. When nearing the top, and walking leisurely up a slighter incline, I again took it, and found it 97.5°. After resting at the top some time, and feeling chilly in a cold wind, it was 98.6°. These experiments are not new. I tried them some years ago with similar results, and I believe they were first made public in a letter from the pen of Dr. Tempest Anderson, published in *Nature* ten or fifteen years ago. Their bearing on the problem in question is evident. During the raising of the body to the height spoken of these experiments seem to me to point to the fact that there is largely increased constructive metabolism, probably in the muscular tissues, and a locking up of heat in consequence, resulting naturally in diminished temperature of the body as a whole. A similar explanation may not improbably explain the normal diurnal variation of temperature observed in health."

INIQUITOUS DECISIONS.

THE legal and medical professions are generally on very good terms with each other, in this country at least. But there are at times some most extraordinary and unjust decisions sent down from the bench upon us. One of the most glaring instances of this was the case of Dr. Bradley, in whose behalf the medical profession of England has shown so much sympathy and generous help.

Now we hear of a case in California quite as iniquitous, judging from the facts given in the *Pacific Medical and Surgical Journal.*

In April, 1884, Dr. Graves, of Petaluma, Cal., was called to see Mrs. Winters, the wife of a laborer whose family he had attended gratuitously for nearly sixteen years. He found that the woman, who was fifty-eight years of age, had fallen from a height and injured her ankle. The limb was very much swollen, so as to interfere with examination, but no crepitus could be elicited, neither was there any displacement or shortening; and, as the swelling continued, the limb was placed in position and wrapped loosely in cloths saturated with anodyne lotions. The patient, we are told, received every attention from Dr. Graves, but there was left finally some stiffening of the joint and a very slight inversion of the foot. No complaints were made until a new doctor arrived in the town, who told the patient that the limb had been badly treated, and advised her to sue for malpractice. "The case," continues the *Journal*, "was examined by ten of the chief surgeons in the State, including Drs. Lane, McLean, Morse, and Dennis, all of whom said that there might have been a sprain or an incomplete fracture of the external malleolus, but that the ends of the bone were in perfect apposition and never had been separated, and that the stiffening was probably due to inflammatory adhesions.

"Two other doctors, one of them being he who advised the suit, testified that there was shortening of the limb, and that the lower fragment of the tibia had been driven up and behind the fibula. One of these would-be surgeons, Dr. Wells, is nearly eighty years of age, and had not read a work upon surgery for thirty years; the other, Dr. Ivancovich, confessed that he had no special experience in surgery. Their incompetence may be judged from the way they measured the patient's limb *in court*. This was done by taking a carpenter's rigid rectangular rule, and measuring the limb as she maintained the upright position.

"The result was that in the opinion of nine jurymen the testimony of two unknown, inexperienced general practitioners outweighed that of ten specialists in surgery, all of whom are well known throughout the State, and some of whom possess a national reputation, so that a verdict was returned in favor of the plaintiff, awarding her $8,000 damages."

It appears to us, from the facts given, that this decision is so gross an outrage upon the profession, as well as so great a personal injustice and misfortune to Dr. Graves, that the physicians of California are in duty bound to help straighten out the matter. They should either get the decision reversed, or contribute to the needs of Dr. Graves.

THE ONE-IDEA SYSTEM IN THERAPEUTICS.

NOTHING is so striking in medicine as the occasional success of certain men of one therapeutical idea. Given a certain dietetic measure, or potent drug, or ingenious mechanical appliance, let its user apply it continuously, confidently, and with a certain reserve of mystery, and he will be almost sure soon to become overrun with patients.

The practising physician is continually running against these gentlemen, who are curing cases by methods which, when applied by himself, often fail. Who has not heard of meat and hot water, of prisms and tenotomy, of Clemen's solution and diabetes, of electrolysis and strictures, of Apostoli and his galvano-cautery, of spinal ice-bags and the ganglionic system.

It is one of the instructive though not very satisfactory features of the medical art, this success of these one-idea artists. We know that in many instances they not only draw great numbers of patients, but cure a good many of them. It is not safe, however, for any one to infer that he can go and do the same thing. We do not hear of the numerous therapeutical "cranks" who fail miserably with their hobbies. Besides, there is large room for the suspicion that these monotherapists are dishonest, and on the whole do more injury than good.

THE DANGERS OF SUBCUTANEOUS INJECTIONS OF ETHER.

THE practice of injecting ether under the skin in cases of collapse, in which prompt stimulation is demanded, is so common and, in the main, so satisfactory in its results, that we are apt to forget that serious consequences may ensue. Several cases of this nature have been collected by a recent writer in the *Gazette Médicale de Paris*, in which sensory or motor paralysis of a member was caused by the hypodermic injection of ether. And Barbier has related a case of perforating ulcer of the foot believed to be due to the same cause. The anæsthesia and paralysis were probably caused by the action of the ether, and not by injury with the needle, for Pirogoff has shown that ether exerts an injurious effect upon the nerve-structures, and further, paralysis has never, so far as we know, been caused by puncture of a nerve by the needle used in giving subcutaneous injections of solutions of morphine.

POST-MORTEM ALBUMINURIA.

IT has been found by MM. Vibert and Ogier, that the urine drawn from the bladder of a cadaver is almost invariably albuminous, even when there was no lesion discoverable in any part of the urogenital apparatus. It was noticed in their experiments, also, that the longer the time was since death had occurred, and the less urine there was in the bladder, the greater was the proportion of albumen contained in it. The source of the albumen in these cases was shown to be the mucous membrane of the bladder, for, when the bladder was removed from the cadaver, emptied of its contents and washed, and then filled with distilled water, this fluid was found in a short time to become markedly albuminous.

This is a point well worth bearing in mind in the examination of the bodies of those who have died suddenly. For the mere fact of there being albuminous urine in the bladder would be insufficient to base a diagnosis of renal disease upon, and should not be given great weight unless corroborative pathological changes were also found in the kidneys.

THE QUESTION OF OPERATION IN CARCINOMA OF THE BREAST.

IT is the opinion of most writers that carcinoma of the mammary gland is a condition that calls imperatively for operation, not only to relieve pain and free the patient from a disgusting sore after ulceration has occurred, but also to prolong life. As to the latter point, however, there is not perfect unanimity among authorities—rather less, indeed, than is generally supposed by those who have not studied closely the more recent literature of the subject. There are symptoms of a threatened reaction in the mind of the profession, and it is not beyond the range of possibilities that, not many years hence, operation in cancer of the breast will be as exceptional as non-interference is now.

In the article on Carcinoma in the "Reference Handbook of the Medical Sciences," edited by Dr. Buck, the author, Dr. Satterthwaite, says that the statistics in a small number of cases would indicate that life is prolonged by operation for an average of more than eleven months, an estimate which he regards as a low one; yet he states that in his cases the growth of the disease was more rapid after removal. Dr. Lemaître, in a short paper read before the Société de Médecine de la Haute-Vienne (*Journal d'Accouchements*, October 15, 1885), argued strongly against the advisability of an operation, and asserted that the subjects of mammary cancer lived longer when the policy of non-interference was followed than when the tumor was removed. Boyer says that the extirpation of a tumor of undoubted cancerous nature should never

be undertaken. Morris believes that the surgeon should consent to operate only upon the urgent solicitation of the patient, and after she has been told of the probable recurrence of the disease. Velpeau, who regards cancer as primarily a local affection, says that an operation is justifiable only at the very incipiency of the trouble. And, finally, Verneuil has expressed some doubts as to the advisability of amputation of the breast, having observed after operation many cases of pleurisy which he regarded as cancerous in their nature. Lemaître's plea is that, as long as the cancerous disease is allowed to concentrate itself in the breast, the internal organs are comparatively safe, but that removal of the mammary gland invites a metastasis to other more vital organs.

The question is one which has not yet resolved itself into an axiom, and the indications are that it is destined to be the subject of still further discussion before it can be regarded as settled.

A STRIKING INSTANCE OF MIND PROPHYLAXIS.

We have had this week one of the most striking experiments whereby has been proven not only the efficacy of the mind-cure, but what the mind, under favorable circumstances, is capable of as a means of prophylaxis. It is seldom that so perfect an exemplification of the utility of animals as a medium to gain correct pathological results is seen.

Two confectioners were placed on trial for selling candy made of decayed cocoa-nuts, and unfit to eat. Not to hale to justice men innocent of the serious offence alleged, Dr. Edson tried upon his horse a couple of the cakes. The animal was made frightfully sick. Upon this evidence the candy-makers were brought before a jury.

The judge, probably unaware of the recent discoveries of the influence of mind over disease, asked the plaintiffs if they would eat the candy, using this as a test of innocence. They were perfectly willing to do so, and ate the confection, when it was handed to them, with such apparent satisfaction, that the jury one and all felt that they must test it too. The tempting sweet did not make any of them sick, therefore the prisoners were acquitted, the argument, of course, being that that which would not make prisoners and jury, including the foreman, ill, could not be injurious to children, even though it made a horse sick. They left out of consideration, which sometimes happens with jurors, the influence of the mind. The horse, uninfluenced by external considerations, allowed his equine mind no play in the matter, therefore the candy acted as it would naturally be supposed to, were it of the nature the analysis showed it to be; while when eaten by the prisoners, the power of the mind was such that it inhibited the evil effects and psychologized the jury into eating it with childish gusto, and to believe that no ill-effects could possibly arise.

In this instance there is a novel and instructive exhibition of a new and most beneficent method of the mind-cure—that of mind prophylaxis. We forbear to enter into the legal aspect of the question, but one can see at a glance that it is very grave, and that it gives rise to a new complication in the already too tangled net of the law.

A NEW URINARY TEST.

There is often considerable difficulty in making a positive diagnosis in the early stages of typhoid fever. Malarial fevers, acute general tuberculosis, and other febrile conditions may resemble for a time the early stages of typhoid. For this reason the peculiar urinary reaction occurring in typhoid and typhus, to which attention was called by Dr. Dana at a recent meeting of the Practitioner's Society (see page 635), is of much interest. This test consists in adding to the urine an acidulated solution of sulfanilin acid. The mixture is then made alkaline by the addition of ammonia, and allowed to stand for twenty-four hours, when a greenish-colored deposit of phosphates occurs. This reaction is scarcely ever seen in the urine of healthy or afebrile persons, and very rarely, indeed, in the urine of febrile cases, except those of typhus, typhoid fever, and measles. Consequently its appearance in the urine may have a strong and important confirmatory value in diagnosis.

Professor Ehrlich, to whom we are indebted for this test, believes also that it has a prognostic significance in certain cases of chronic phthisis and of pneumonia.

News of the Week.

Medical Mayors.—At the recent elections in England eleven cities elected medical men as mayors.

The International Sanitary Conference which was announced to be held in Rome in December will not reassemble. The *Opinione* says, in an inspired article, that "after the discussions of last summer, which demonstrated the deep divergences of opinion between the representatives of the various Powers, and the hopelessness of their coming to an agreement, the re-convocation of the Conference would be devoid of any practical aim."

An Indiscreet Doctor.—Dr. Haywood Smith, a well-known and highly esteemed London physician, was unwise and imprudent enough to allow himself to be inveigled into the Armstrong case by Mr. Stead. He chloroformed the girl, examined her, and certified to Mr. Stead that she was "pure." The English medical press naturally condemn his action, and the British Gynecological Society have accepted his resignation as Secretary, expressing their thanks, at the same time, for the distinguished services he has rendered to this Society, and affirming "their belief that in what he did in reference to the Armstrong case he was actuated by what he believed to be the highest motives, while committing a grave professional error."

Cocaine-poisoning from an Unusually Small Dose.—Dr. T. H. Burchard, of this city, sends us the following case: "A brief mention of the following case may serve to call the attention of the profession to the possible dangers incidental to the hypodermic injection of cocaine. I was recently called to remove a needle from the sole of the foot of a young man whose personal characteristics doubtless had much to do in precipitating a condition of things that were well-nigh fatal. He was a tall, 'white-livered' youth of twenty-two years, standing six feet two inches, and weighing one hundred and twenty-pounds. He was remarkably white—complexion,

eyes, hair, etc. To deaden sensibility, I injected beneath the skin, close to the needle, *ten drops* of a four-per-cent. solution hydrate of cocaine. In about four minutes my patient suddenly clutched his throat, exclaiming, 'I am dying,' and fell from his bed unconscious. Respiration ceased, his jaw dropped, his eyes rolled upward, and to all appearances he was dead. His heart was beating very faintly, although his radial pulse was imperceptible. Although startled at this unlooked-for state of affairs, I began artificial respiration at once, and injected, in the absence of anything better, several hypodermics of an aromatic smelling-salts that chanced to be in the room. Later I injected, in two doses, a twelfth of a grain of sulphate of atropia. In addition to a sinapism over the heart, hot bottles and alcoholics, etc., were employed. Fifteen minutes after the catastrophe his pulse was about forty-eight, very feeble; respirations seven to eight; pupils *contracted*. Unconsciousness continued about twenty minutes. Afterward he convalesced nicely. Inferences from the above are obvious."

The Law and Professional Evidence.—A daily paper announces that Dr. J. A. Milne, of Oswego, N. Y., was on November 25th fined $250, with the alternative of six months' imprisonment, for contempt of court in refusing to testify in a criminal case. Dr. Milne pleaded as a defence for his refusal that his testimony would involve the disclosure of professional secrets. The law in New York, as well as in Arkansas, California, Indiana, Michigan, Iowa, Missouri, Minnesota, Montana, Ohio, and Wisconsin, is, that communications between physicians and patients which may relate to the history of a transaction in which a wound has been received, or a particular disease communicated, whenever essential to the treatment of a patient's case, are privileged. In New York it is even expressly enacted that the physician shall not disclose any information which he may have acquired in attending any patient in a professional character, and which information was necessary to enable him to treat the patient.

Cholera in Spain.—The cholera is reported to have disappeared entirely from Spain. No new cases are reported since about November 1st. The secretary of the National Board of Health gives as the total result of the cholera epidemic in Spain, up to October 21st, 273,549 cases, and 101,346 deaths, being a mortality of thirty-seven+per cent. In Italy, up to October 19th, there had been 1,370 cases (mostly in Palermo), and 627 deaths, being a mortality of fifty per cent.

Results of the Continuation of Pasteur's Inoculations for Rabies.—The Paris correspondent of *The Lancet* writes that the young shepherd (Jupille) referred to as being still under observation, and upon whom M. Pasteur has since ceased his inoculations, has returned to his native village. His room is now occupied by another lad of fourteen, who is said to have been bitten by a mad dog at Bordeaux. Two other children, also bitten by a mad dog, have been forwarded to Paris by the Mayor of Roubaix, to be subjected to M. Pasteur's treatment for hydrophobia. The persevering and zealous experimenter will soon have his hands full, and the confidence in his remedy is such that people come from great distances to consult him, without even taking the trouble to find out whether the dogs that bit them were really rabid or not; so that M. Pasteur will, under the circumstances, have some difficulty in selecting his cases. Owing to the favorable results obtained by M. Pasteur, it is proposed to organize a special staff in different localities for the carrying out of his method, and that all medical men should be instructed as to the manner of its employment.

The Power of Health Boards in the Matter of Vaccination in the Schools.—There has been some controversy at Lockport, N. Y., between the Board of Health and the Board of Education, in the matter of the vaccination of school-children. The Board of Health has, as we learn, insisted on the revaccination of school-children who have not been vaccinated for five years. The Board of Education has claimed that the law only compels school-children to be vaccinated once, and does not confer authority upon local health boards to interfere with attendance at school of children not revaccinated. The State Superintendent, Mr. Ruggles, has decided that the Board of Education is right in its position by virtue of the law of 1860, which, he thinks, was not repealed by the law of 1885, conferring power on the local Health Boards.

The Dangers of the Cocaine Habit.—Our caution with regard to the dangers of the cocaine habit has received an early illustration. It is announced that Dr. Charles D. Bradley, a Chicago physician, has become insane from the excessive use of this drug and that of morphine. It is stated that he became a slave to the drug, and made the most absurd claims about its powers. He declared that he was going to revolutionize medicine generally, and become the world's benefactor. In pursuit of his wild imaginings he mortgaged all his property, and his sick wife and invalid children are in absolute poverty. While before the judge he acted in a most eccentric way, calling on God to convince the judge and physicians that his theory was right. Dr. Wadsworth and Dr. Brower, who attended him, testified that they believed him insane from the use of cocaine and morphine, and thought he should be confined in an institution.

The Annual Meeting of the National Conference of State Boards of Health will be held in Washington at the same time that the American Public Health Association meets there, December 8th to 11th.

Virchow on the International Medical Congress.—At the anniversary meeting of the Berlin Medical Society, to which we made reference last week, Professor Virchow, in his address, said: "The larger we grow the more influential will this Society become, so that, at least for Berlin, it will prove that it is representative. We do not desire to be recognized as the representatives of all Germany, we do not wish to go beyond our own locality, but we desire to set an example, and to furnish strong testimony of that which we represent in our own proceedings. Of what may result when these aims are lost sight of we have at this moment a mournful example in America. You know your delegates to the International Medical Congress, held last year at Copenhagen, were instructed to invite the Congress to hold its next session at Berlin. We were outvoted, I am sorry to say, by the

co-operation of our German colleagues. The Congress decided to go to America. What is the result? A situation which at this moment makes it extremely dubious whether an International Congress in America is possible. While the individual societies of that country, to some extent like ours, consider science their shield and their defence, and have endeavored to create an organization in which the eminent representatives of American medicine shall also appear as the representatives of the coming Congress, the American Medical Association, a vast society of practising physicians, extending throughout the land, usurps the control of the organization of the next session of the Congress, and creates such confusion that, I am informed, verbally and by letter, no one at present is able to see his way out of the difficulty. Now, how did this dilemma originate? In the fact that the American Medical Association has set up a Code of Ethics, so called, and that with this code of professional ethics the admission to the Association is so broadly extended that entrance is free to all manner of dubious individuals. Hence has it resulted that, instead of eminence, mediocrity has come to the front, and that this Association, where the code is concerned, concerns itself more with forms than with principles. May I not then say that we are proud of our organization, by virtue of the care which we exercise in electing new members, and that we have, in this way especially, guarded against the necessity of forming a code of ethics, which every upright physician should in fact carry in his own bosom, and if he transgresses it he should be restrained both by the example and admonition of his colleagues? This has been our conviction, thus have we regarded the Association, so do we regard the great associations of physicians. With us, no necessity has been found to establish special codes or protective measures to secure us against the actions of dishonorable associates."

Typhoid Fever in Brooklyn has been unusually prevalent this fall. As regards the cause, a correspondent of *The Times* writes: "If you want a solution of the question why typhoid fever is so prevalent in Brooklyn, examine the drinking-water. Six years ago the city had clear water; no heavy rains then affected its cleanliness. Now, after every storm, the water is brown with dirt." He suggests that this indicates excessive surface drainage, which may cause and spread disease. He also directs attention to the graveyards that "surround the source of our water-supply."

Death of an old Physician.—Dr. Ephraim Clark, one of the oldest residents of Richmond County, N. Y., died November 20th, at the age of eighty-nine. For the past thirty years he was the County Physician, and a leader in the Democratic party, in Richmond County. He was the oldest practitioner on Staten Island, and was one of the physicians who attended Aaron Burr when he died.

An Expense Account Not Allowed.—A protest appears in one of the daily papers against the decision of the Treasury Department in the case of Dr. J. S. Billings. This officer was ordered by the Surgeon-General to visit the International Medical Congress in Copenhagen last year. The order was obeyed with a becoming disregard of personal convenience and with due concern for financial expenditure. Now the Treasury Department refuses to allow the bill for expenses.

Social Purity.—An association has been formed in this city which has for one of its objects "maintenance of the law of purity as equally binding upon men and women." One of the speakers at a recent meeting said that it was a matter of record that this State has expended more than $1,300,000 in supporting four generations of the descendants of one prostitute.

A New Disease of Editors in Kentucky.—Our invaluable contemporary, *The Medical Herald*, thinks that we are suffering from "cerebral ramblissment," and wishes us to "acknowledge our wrongs and enter the ranks of the American Medical Association." We would cheerfully concede the "ramblissment" if we knew what it was, for we should expect to be quite proud of having what is evidently a Kentucky disease. As for our "wrongs," we shall not acknowledge them on any account, considering it unmanly; but we are much obliged to the *Herald* for allowing their existence, and in return we wish to ask if it really thinks it is doing itself wrong to advocate the Old Code on one page and advertise the *British Journal of Homœopathy* on the next. Alas for *fames auri!*

The Practical Introduction of Nitrous Oxide and Oxygen as an Anæsthetic in Labor.—Some months ago Professor Zweifel, of Erlangen, erected the necessary apparatus for the supply of the mixed gases (nitrous oxide 80 and oxygen 20) to the accouchement ward of his obstetric clinic. He found it best to administer the gases continuously during the latter part of labor, when the pains were most severe—not, as was practised by Klikovich, merely giving the gases when signs of an approaching pain appeared. Though this treatment has been adopted in sixty cases, no retardation of the process was ever observed. The patients were generally semi-conscious; so that, though they would answer if asked a question, they felt no pain, and were unaware when the child was born. In one case, where the woman screamed as a stitch was put in the perineum, she afterward declared she had felt nothing. We see no special advantage in the use of these gases over chloroform.

The Academy of Medicine of Lima.—The opening session of the Academia Libre de Medicina was held in Lima, Peru, on July 29, 1885. In his inaugural address the president, Dr. Odriozola, sketched briefly the history of the formation of the society, recounting the labors, often apparently hopeless, of those who had toiled for eight months to accomplish this work, and congratulating them and the profession of Peru that at last their efforts had been crowned with success. The Academy opens with five sections—on medicine, surgery, biological science, public medicine, and natural and physical science.

Pensions to Physicians' Families.—The authorities of Saragossa have voted to grant an annual pension of 1,500 pesetas (about $300) to the family of every physician who died of cholera while in the discharge of his professional duties; and the hope is expressed that the officials of other cities and provinces will imitate their example.

Reports of Societies.

PRACTITIONERS' SOCIETY OF NEW YORK.

Stated Meeting, November 6, 1885.

BEVERLEY ROBINSON, M.D., PRESIDENT, IN THE CHAIR.

DR. C. L. DANA described

A NEW URINARY REACTION AND TEST,

first suggested by Professor Ehrlich, of Berlin, as of value in the diagnosis and prognosis of certain febrile diseases

In 1882 Professor Ehrlich (in *Zeitschrift für klinische Medicin*, 1882; *Charité Annalen*, 1883) published his experiments with the diazor-compounds, as tests for aromatic bodies in the urine. When aniline (C_6H_7N), which is a nitrogenous body resembling an alkaloid, is mixed with nitrous acid, a series of peculiar bodies result known as the "diazor-compounds." These compounds have the property of uniting with a large series of bodies, chiefly of the aromatic group, forming colored compounds. Ehrlich prepared a saturated solution of sulfaniein acid in an acidulated solution of water. To this he added a little nitrous acid. The result was the production of a mixture containing diazor-compounds.

This mixture is added to the urine and the whole neutralized with ammonia, causing certain peculiar color reactions, which are, as Ehrlich believes, of value in the diagnosis and prognosis of certain febrile diseases.

Over two years ago I obtained some of the sulfaniein acid through Mr. Wm. Metenheimer, druggist, Sixth Avenue and Forty-fifth Street, and have been making use of the test ever since. I have tried it over one hundred times in all forms of disease. Through the kindness of Dr. Kinnicutt, and of Dr. Sherwin, late house-physician at St. Luke's Hospital, I obtained trials of it in a number of cases there. Through the house-physician of the Nursery and Child's Hospital, and through several of the visiting physicians of the Northeastern Dispensary, I obtained specimens for which I must express my acknowledgments.

At first my results were quite negative, and I wrote to Professor Ehrlich asking for explicit directions. He kindly answered me, sending on his own formulæ, which I have since used. Further errors were made, from the fact that the solutions soon spoil. I believe, however, that I have finally obtained enough facts to enable me to speak definitely about the test, and I present it to the Society as one that is of much interest, and, I believe, of considerable practical value to the physician.

The character of the test is indicated by the following summary of the diseases in which the reaction appears: (1) Never in the urine of the healthy; (2) never in the urine of the afebrile, except in rare instances of progressive heart-failure, chronic hepatitis, carcinoma, leukæmia, malarial cachexia, senile marasmus, cold abscess; (3) very rarely, indeed, it appears in rheumatism, meningitis, erysipelas; oftener, but still very rarely, in bad cases of pneumonia, scarlatina, diphtheria; (4) almost constantly in measles, typhus, typhoid, and very often in rapidly progressing phthisis.

The test, therefore, is of especial value in diagnosticating typhus or typhoid from malarial, tubercular, or syphilitic fevers, or in recognizing the appearance of a relapse of typhoid, in diagnosticating measles from rotheln or other eruptive fevers.

Various criticisms have been made upon this test. Most of these are favorable, but some are not. This contrariety I can readily understand, since the test requires one to have fresh and pure materials, and fresh specimens of urine.

Ehrlich repeated his tests about seven thousand times, as he states.

Fischer, of Berlin ("Dissertation," Berlin, 1883), repeated the test. He found in forty-eight cases of pneumonia that the reaction was present only nine times. In these cases there was some complication, and he concludes that the presence of the red coloring is a bad omen. He found the reaction in the eight cases of measles and three of typhus which he examined.

Brecht, of Berlin ("Dissertation," Berlin, 1883), applied the test in a large number of cases of diseases of various kinds, and his results confirm those of Ehrlich and Fischer.

J. Georgiewsky, of St. Petersburg (*Deutsche Medicinische Wochenschrift*, No. 48, 1883), applied the test in fifty healthy cases with no result. He also tested in a large number of cases of various forms of afebrile disease, and obtained the reaction only once, in a case of bronchitis and emphysema with slight fever. He found the reaction in all cases in typhoid fever, in one complicated case of pneumonia, and one fatal case of pneumonia with gangrene. He tested it in one hundred cases of phthisis, and found that there was some relation between the progress of the disease and the presence of the red reaction, as Ehrlich claimed.

F. Penzoldt, of Erlangen (*Berlin. klinische Woch.*, 1883, No. 14), denies the value of the test, as a result of one hundred and thirty trials. To a statement by Ehrlich that he did not use the test correctly, Penzoldt has replied (*Berlin. klin. Woch.*, 1883, No. 49).

Escherich, of Wurzburg (*Deutsch. Med. Wochenschr.*, 1883, No. 45), has repeated Ehrlich's experiments, and confirms his results.

The subject was discussed before the Berlin Society of Internal Medicine, June 16, 1884, the views expressed being generally antagonistic to those of Ehrlich.

Finally, Ehrlich reiterates his views, and presents his latest conclusions in the *Deutsch. Med. Woch.*, 1884, No. 27.

The method of applying the test is as follows:

Three solutions are made.

SOLUTION A.

℞. Aquæ	100.
Acid. muriat. conc.	5.
Sulfanilin acid,[1] q. s. ad saturation.	
M. Sig.—Sol. A.	

SOLUTION B.

℞. Sodii nitrit	0.1
Aquæ	20.0
M. Sig.—Sol. B.	

SOLUTION C.

℞. Sol. A	50.
Sol. B	1.2
M. Sig.—Mixture for use.	

Solutions A and B keep for some time in cold weather; solution C, or the mixture, does not keep well, and should be made fresh every time it is to be used. It is safer, I find, to have solutions A and B fresh also. The nitrite solution at least appears to decompose very quickly.

To make the test, take a test-tube one-third full of the suspected urine, add an equal amount of the mixture C. This causes a slight yellow discoloration. Then add a little stronger aqua ammonia sufficient to alkalinize the solution (3 j.–3 ij.). This causes in normal and afebrile urine a beautiful reddish color, in which, after standing twenty-four hours a deposit (of phosphates) is seen which is of a natural light-gray color.

If *the urine presents the diazor-benzol* reaction as in the class of cases indicated, then, after adding the mixture C, the color is a darker one having a purplish tinge. After standing twenty-four hours, there is a deposit of phosphates *colored a dark olive-green.* This colored deposit I have only seen in typhoid fever, measles, and once in a badly complicated case of pneumonia. I have never found it in scarlatina, phthisis, or any afebrile urine. The presence of albumen or sugar does not affect the

[1] This can probably be obtained through Mr. Metenheimer, Sixth Avenue and Forty-fifth Street, New York City.

test. The test is a simple one, and can be applied in a very short time when the materials are at hand.

THE LOCAL TREATMENT OF CHRONIC DYSENTERY.

The discussion was opened by DR. CHARLES S. WARD, who said: Briefly, as a text, I wish to bring more prominently before the Society the treatment of chronic dysentery, locally, as proposed by Dr. Maury, of Memphis. Starting with the clinical fact that such cases as we recognize as chronic dysentery are due to lesions which exhibit themselves predominantly in the lowest part of the large intestine, we are enabled to treat them efficiently, and for the most part effectually, by local applications.

The method, so well known and practised, consists in first thoroughly emptying the bowel by a saline, then anæsthetizing the patient, preferably by nitrous oxide gas, the patient being in the Sims position; the sphincter ani is thoroughly paralyzed after the manner of Metcalfe, a Sims speculum introduced, which, if properly used will allow a view of the entire rectum, exposing every point of ulceration, to which applications of nitric acid may freely be made by a rod with its end wrapped with cotton and dipped into the acid. It is essential that the acid be freely used, and any excess afterward neutralized by a solution of bicarbonate of soda brushed over the rectum before withdrawing the speculum. My uniform experience in a large number of cases leads me to expect that there will be no action of the bowel for twelve or fifteen, and even thirty-six hours after the application, and whereas it may be argued that applications to the rectum alone cannot possibly reach ulcerations which almost invariably exist above, I must answer that either the anæsthesia produced by the application allows time to heal them, or the relief following the subsidence of tenesmus permits the bowel above to regain, in some measure, and to maintain, a normal peristalsis, thus favoring a return to a healthy action and normal state of the bowel as a result.

My experience leads me to expect, during the exfoliation resulting from the caustic application, which occurs from the second to the fifth day, that there will be a number of actions of the bowel, which, however, will be more natural in character. At the end of ten days it may be necessary to repeat the application of the nitric acid. There are cases, not many, however, which require more applications. Of course, the diet should be rigidly a milk diet.

I have spoken only of nitric acid, for I believe it far excels all other applications; in my experience it is far superior to solutions of the argentic nitrate, being less painful and more efficient. Properly applied, no slough should result, rather an exfoliation, followed by a normal development of epithelium over the entire mucous membrane.

To sum up: Astringent and narcotic remedies by the mouth avail but little.

Proper cleansing of the rectal mucous membrane and direct applications to the entire rectal wall, as well as to the ulcerations, tends to rapid and permanent cure.

Opiates are of service for a few hours after the applications; they should be given by the mouth or hypodermatically, as the rectum after such applications fails to absorb.

DR. JAMES B. HUNTER said he had but little to add to what Dr. Ward had already said. He assisted in the first case in which Dr. Thomas made use of this method of treatment, and it was when Dr. Maury was present, probably eight or nine years ago. The patient had been suffering for several years, and the examination, after dilating the sphincter, showed numerous ulcers, which were touched with nitric acid. No other treatment was adopted and the patient was quickly cured. After that he assisted Dr. Thomas in treating several cases, and had also treated several cases of his own. He had regarded the method as applicable to those cases in which ulcers were within reach.

He had used nitrate of silver, but the effects were not so satisfactory, and it gave the patient a good deal of pain. After the use of nitric acid the pain had been, in the cases in which he had seen it applied, only very slight.

The ulcers, in the cases in which he had seen it used, had apparently been within three or four inches of the verge of the anus. There may have been ulcers high up, but they were chiefly confined to the lower part of the bowel.

DR. PEABODY said the method was important, but he thought it was one for treating ulcers of the rectum rather than chronic dysentery. It had been claimed that the application of caustics to the lower ulcers had a tendency to heal the upper ones. If that could be substantiated it would be a matter of very great interest.

DR. G. F. SHRADY said he was unable, in the first place, to see how it could be proved that ulcers existed higher up, when necessarily out of sight, and, in the second place, that they were cured. Neither of these possibilities could be demonstrated except by an autopsy.

DR. A. A. SMITH said the subject was one of special interest to him, because in the autumn of 1872 he spent two months with the late Dr. Lente at Cold Spring, where he had opportunity to test this method of treatment with the most marked success. Dr. Lente's plan was to dilate the sphincter, introduce the speculum, wash out the rectum, find every spot of ulceration and touch it with nitric acid, and immediately apply a strong solution of bicarbonate of soda. For that reason it was a matter of considerable interest to know the exact time when Dr. Maury began this method of treatment. It seemed to Dr. Smith a matter of a great deal of importance that the effect of the nitric acid should be neutralized very quickly, because of the liability to produce a condition which might be followed by stricture. The plan which he had followed had been to touch the ulcer with nitric acid, and then as quickly as possible to syringe upon the part a strong solution of an alkali, usually bicarbonate of soda.

DR. HUNTER said that when he first began to use this treatment he was very much afraid of the occurrence of stricture; but he had taken pains to inquire of the patients several years afterward, and had learned that no such result had followed.

DR. SMITH said that latterly he had applied the acid to only one or two ulcers at the same time.

DR. PEABODY said there was no question but that ulcers existed above ordinary reach—indeed, very high up—with chronic dysentery. It was also unquestionably true that the ulcers which produced the most marked symptoms were situated low down. Ulcers of the intestines as such, whether large or small, produced no symptoms, as extensive ulceration of the small intestine might occur without any symptoms whatever being produced by it. The same thing might be true of ulcers in the *upper part* of the large intestine, but with regard to ulcers in the *lower part* of the large intestine it did not hold good.

DR. W. M. POLK said that when Dr. Thomas published his pamphlet, giving an account of this method of treatment—which, by the way, was an old one—the observations had been made in those cases of chronic dysentery where the difficulty was located in the rectum, and could be reached, and for that class of cases he regarded it as the best method which could be adopted; but in the large proportion of cases the ulcers extended above, and could not be reached. The method of applying the acid was to dilate the sphincter, and introduce a Sims speculum.

In connection with this subject, he would make mention of the local application of cocaine, to which his attention had been directed by Dr. Joseph E. Winters, who had used a four per cent. solution in a case of acute dysentery occurring in a child, and with very satisfactory results. The application was made through a speculum, and in a case in which all other remedies for the relief of tenesmus had failed.

DR. KINNICUTT had used a four per cent. solution of

cocaine in one case of dysentery with moderate tenesmus, making applications with a camel's-hair brush just within the rectum; the relief of the pain was very great.

DR. HUNTER recalled a case in which he used the Paquelin cautery in the treatment of ulcers of the rectum, but the result was not at all satisfactory, and afterward he cured the same patient by the local application of nitric acid.

DR. C. L. DANA directed attention to the internal use of naphthalin, which he had used in one case only, but with a good result. He began with five-grain doses, quickly increasing it to fifteen-grain doses. A single full dose of the remedy would disinfect the fæces for twenty-four hours, and he thought it possible it might prove to be of service in the treatment of chronic diarrhœa and dysentery.

DR. GIBNEY had given bismuth in drachm doses every two hours for twelve hours, with permanent relief, in at least half a dozen cases which had resisted other treatment.

DR. SMITH suggested that naphthalin be combined with the bismuth in order to correct the intolerable odor following the use of the latter remedy.

DR. CLEVELAND referred to three cases of chronic diarrhœa which got well under the use of castor-oil, a drachm night and morning, administered preferably in capsule. These cases had resisted other forms of treatment. The use of the oil was persisted in for several weeks. The effect was, for the first three or four days to make the passages more frequent, but afterward the passages were almost normal.

THE PRESIDENT read statistics gathered for him by Dr. E. B. Dench, Jun. Asst. in St. Luke's Hospital. From 1875 to 1885, the total number of cases of diarrhœa and dysentery, treated by local applications of different kinds, was *twenty-five;* acute dysentery, *nine*—four cured, two temporarily improved, and three unimproved; chronic diarrhœa, *nine*—five cured, four unimproved, one dying of pulmonary disease, three cured by internal medication; chronic dysentery, *seven*—two cured, three improved, one temporarily improved (died of perforating ulcer), one improved (improved by internal medication).

The Society then adjourned.

NEW YORK ACADEMY OF MEDICINE.

SECTION IN OBSTETRICS AND THE DISEASES OF CHILDREN.

Stated Meeting, November 25, 1885.

ALEXANDER S. HUNTER, M.D., CHAIRMAN.

DR. JOSEPH E. WINTERS read a paper on diphtheria (see page 617).

DISCUSSION ON THE TREATMENT OF DIPHTHERIA.

DR. W. H. THOMSON was requested to open the discussion, and said he had been very much interested in the paper, as every practitioner must be who had seen much of this exceedingly formidable disease. As each speaker had but ten minutes in which to express his opinions, he would beg to differ from Dr. Winters in some points at the outset. The author might comfort himself, in not having convinced all of his auditors of the correctness of his views, with the fact that, regarding diphtheria and croup, there were scarcely two physicians who thought alike. First, he should differ from him *in toto* on the subject of the elimination of the poison of diphtheria. We should not expect, for example, that a field would eliminate wheat which was growing in its soil; we should expect, on the contrary, that it would give the wheat opportunity to grow. In any disease which is propagated in the following way, namely, by the introduction into the system of a small quantity of a morbific germ or agent, which is followed by a period of latency, during which time no one knows what is taking place; then by a period of development and reproduction corresponding to three great facts seen in nature, that is, germination, development, and reproduction; he could not see how in such a case the system was going to be liberated of the morbific agent by elimination through the skin, kidneys, or other excretory organs. The skin cannot be expected to eliminate the disease in the case of small-pox, for it is itself the seat of lesions occurring in the course of the disease; the kidneys cannot be expected to eliminate the poison of scarlet fever, as they themselves are often the soil in which the disease manifests itself; nor could he understand why we should expect in diphtheria, which is an analogous affection, being a communicable disease, to eliminate the poison by means of the skin, kidneys, or alimentary canal. Therefore, in starting out to select measures for counteracting this formidable complaint, he freed his brain completely of all thought of a medicine which would have the power to eliminate the diphtheritic poison. But what we might do, if we saw the case early enough, and thus have time, was to eliminate or prevent the occurrence of some of the secondary results of the diphtheritic process. While he did not think the bowels, the kidneys, or the skin carried off anything of the diphtheritic poison, he would freely admit that in febrile diseases generally, diphtheria included, a formidable complication consisted in the arrest of gland secretion in all parts of the body. Whenever fever occurred, it at once caused suspension of the secretions of the alimentary canal, and of the excretions in various parts of the body, and wherever arrest of the natural excretions took place for twenty-four or forty-eight hours, the patient must suffer more or less from this accumulation of poisons in the system. Now the germ of diphtheria—meaning by the term germ a seed which reproduced itself—found a better soil for development in blood which was poisoned by retained excretions. He therefore always administered at the beginning of febrile diseases, notably scarlet fever and typhoid fever, a medicine which would keep the bowels in their usual state of activity, and not more.

Regarding other indications in the treatment of diphtheria, the first was, as far as possible, to prevent the depressing effects of the specific poison. Here he uses the term specific poison advisedly, meaning thereby the poison generated by the growth of the diphtheritic material. That poison had the same relation to the diphtheritic material that the poison of septicæmia has to the bacteria which occasions pyæmia. The bacteria which causes pyæmia is a living thing, which reproduces itself, and can be introduced on the lancet and made to affect the system. Septicæmia, on the other hand, is due to a poison generated by this, and can be separated from it. So in diphtheria we have a poison generated in the local necrotic process of diphtheria, which is very dangerous, which is paralyzing to the nervous system, and particularly to the muscular tissue of the heart. He believed, therefore, in the use of antiseptics, among which the muriate tincture of iron takes a high rank, as do other preparations of iron. The muriate tincture is an antiseptic for two reasons: first, because it carries chlorine, and, second, because it brings oxygen into the system. The disinfectant properties of chlorine may be further obtained by the use of Labarraque's solution and generating chlorine gas in the room.

Another feature in the treatment was the use of alcohol, which should be administered at the time of feeding, usually with milk. To wash out the throat with a solution of chlorate of potash would give the child much relief by softening the exudation and increasing the secretion of mucus, enabling the child to expectorate easily.

THE CHAIRMAN thought the amount of the tincture of iron which the author of the paper had used was very great, and he asked Dr. Thomson in what doses he would recommend its use.

DR. THOMSON replied that the doses which had been mentioned by Dr. Winters were larger than he had ever administered, and larger than he would have considered

safe, but the author of the paper had presented facts, and facts must outweigh opinion.

Dr. John C. Peters agreed in the main with Dr. Thomson, but he had always looked upon diphtheria as a local affection. The starting-point was in the throat, and if the blood became affected it was secondary, and arose from the progress of the affection in the throat. Consequently he had always been exceedingly careful, before allowing the child to eat or drink, to have the throat well syringed with chlorate of potash or water. He had thus seen the throat kept clean and free from offensive odors. If it were not kept clean there would be danger of secondary infection. He agreed with Dr. Thomson on the point of elimination of the poison. He also believed in the administration of a laxative at the beginning of the disease, for in almost all acute diseases the last meal was not thoroughly digested. He believed in the use of bichloride of mercury as a disinfectant. A small quantity might be used for washing out the throat, and for internal administration the powder should be placed upon the tongue, thus getting its full benefit. His main treatment was local, and he did not believe in pouring medicines down into the stomach with the hope of curing the throat affection. He was opposed to removing the membrane or applying any harsh measures to the throat. As to poultices, he would object to their use decidedly, for once begun they must be continued, thus rendering the throat tender, and doing more mischief than good. A flannel covered with oiled silk would protect the throat, and cause enough sweating. He believed with Dr. Winters in the disinfecting properties of sulphur, but he had greater faith in turpentine, which he had sprinkled on the floor and furniture, and caused the vapor to fill the rooms. He agreed with Dr. Winters also in the opinion that in the large majority of cases the disease did not involve the lungs. By simple and proper management a large proportion of the cases would not end fatally.

Dr. Fowler said that from what he had seen of croup and diphtheria he regarded them as distinct diseases. If the case were one of croup, there being no apparent implication of the fauces, his treatment was calomel, small doses frequently repeated, and alcohol.

As to throat symptoms in diphtheria, if they were extreme, he would always apply ice, from which he had obtained great satisfaction. Ice locally, muriated tincture of iron, in thirty-drop doses every half-hour, and plenty of alcohol, even to the extent of intoxication if there were great exhaustion, seemed to be required.

Dr. W. E. Forest said that one practising medicine in the lower part of the city was apt to see a good deal of diphtheria, and probably would try almost every mode of treatment. According to his experience, the only successful way to manage diphtheria was to treat it vigorously as a local disease. If the case were seen early, and vigorous local treatment adopted, the disease could almost certainly be controlled. The local treatment should be astringent, for the purpose of preventing the development and absorption of the germs of the disease, and in addition to that, supporting measures. If the general system has become thoroughly affected before the child is seen, recovery will depend, in the first place, upon the natural strength of the child to resist the influence of the poison, and, secondly, upon the amount of support which can be given by iron and brandy, and then upon what benefit local treatment will give.

Dr. J. Blake White believed croup and diphtheria were two distinct diseases, the first-named being at the beginning sthenic, the second asthenic, in character. He believed in the use of large doses of iron in diphtheria, and of large doses of calomel, say two doses of ten grains, in croup. A gargle of turpentine and milk, fifteen to thirty drops of the spirits of turpentine in half an ounce of milk, every half hour to two hours, was of benefit in diphtheria. Some good came from the use of antipyrine as a febrifuge. With regard to the question of elimination of the poison, he was inclined to agree with Dr. Winters.

Dr. Billington said his views on this question were generally known, but he wished to thank Dr. Winters for the thorough manner in which he condemned the abuse of mercury. In dealing with a formidable disease, it was a most important duty on the part of the physician not to make himself a source of danger to the patient. He agreed with Dr. Peters that the disease primarily was local; it mattered not where it began, whether in the throat or on the abraded skin, and from that local point the poison was absorbed and carried into the general circulation. It made a great difference usually in the plan of treatment which one was likely to adopt as to whether he regarded diphtheria as primarily a local or a constitutional affection. Looking upon it as he did, he thought the proper treatment was to attack it locally. Several years ago he advocated local syringing with simple salt and water, frequently repeated.

Dr. L. E. Holt had seen three cases the past year in which the disease had extended down the larynx and caused death from obstruction. With regard to local treatment, it was a very easy thing to order that the throat be swabbed frequently with an antiseptic solution, but it was quite a difficult thing to do. It had been stated this evening that if we did no good we should do no harm. Dr. Holt thought that here we would do actual harm because of the resistance offered to the treatment, and the ineffectual manner in which it would be carried out. He thought that in children under four years of age we must rely almost entirely upon constitutional treatment. As to treatment by bichloride of mercury, he had employed it, but had not seen any good effects from it whatever. To be sure, the cases in which he used it were severe ones, but if the remedy was to prove of any benefit it should stand the test in severe cases. Dr. Holt favored the tincture of chloride of iron in large doses, above all other remedies. If given frequently, it acted as an astringent and antiseptic. He had never seen it used in so large doses as had been mentioned by Dr. Winters. He also used alcohol in large doses, and adopted supporting measures from the beginning.

Dr. S. W. Smith agreed with the author in the view that diphtheria and croup were one disease. He gave illustrative cases. As to treatment, it was necessary, in order to test a given course of treatment thoroughly, to carry it out strictly in a number of cases. Believing that the disease was a local affection with a constitutional expression, Dr. Smith had employed the tincture of the chloride of iron and chlorate of potash alternately, and syringed the throat with salt and biborate of soda. In thirty cases so treated he had not seen any indication for the use of alcohol, antipyrine, or any so-called antipyretic. The diet had consisted of milk.

ARE DIPHTHERIA AND CROUP DISTINCT DISEASES?

Dr. Delafield was requested to open the discussion on the above question, and said: In attempting to discuss this question we are met at the outset with difficulty in determining exactly what is meant by croup and diphtheria. All are pretty well agreed that diphtheria is an infectious disease, but when it comes to croup, we find that the word is used in rather an arbitrary way. I think some of you must have noticed this in listening to the speakers this evening. Sometimes the term membranous croup is used as if it meant a distinct disease; at other times as if it meant simply a local inflammation, and these are two different things. If when we say membranous croup we simply mean that a child or grown person has an inflammation of the larynx of a certain anatomical type, as a croupous laryngitis, I think we must all admit that it is perfectly possible to have such a croupous laryngitis without any diphtheria at all.

In the first place, with regard to the lesion of diphtheria. Is there anything specific in it, or have we any reason to expect that there should be anything specific about it?

To both of these questions I should unhesitatingly answer, No. The lesion of diphtheria is nothing but an inflammation of a special anatomical type, and inflammations of exactly the same anatomical type can be excited in mucous membranes by a variety of means. There is nothing specific about it. It is simply that this special disease, diphtheria, is regularly accompanied by a characteristic local lesion, and we can excite an identical inflammation at will by experimental means. So I think we can say without question that diphtheria has a characteristic local lesion, but it has not a specific lesion. Still further than this, I do not see why we should expect that it would have a specific lesion. I think we should expect the same thing in diphtheria as we do in other infectious diseases. We know that in epidemic cerebro-spinal meningitis, and in meningitis from fracture of the skull, the inflammatory lesion is the same, although the cause of the meningitis is different in the two cases. It seems to me a matter of some importance when we think of lesions of the larynx that we should also think of lesions of other mucous membranes throughout the body. The mouth, the throat, the larynx, the trachea, the bronchi, the stomach, the small and large intestines, and the bladder, comprise the more important tracts of mucous membrane. What do we find with regard to each one of these? We find that they are specially liable to become the seat of catarrhal inflammation, and that they are comparatively rarely the seat of croupous inflammation; and yet they are all capable of being the seat of croupous inflammation as well as of catarrhal inflammation. But when we come to the mucous membrane of the colon we find that it is more liable than any other to take on croupous inflammation. It is, then, simply in accordance with our ordinary experience that while in New York the great majority of cases of croupous laryngitis belong to diphtheria, and simply represent the characteristic lesion of diphtheria, yet it seems to me equally certain that we may have a croupous laryngitis which has nothing to do with diphtheria at all. Of course, no one doubts such traumatic croupous laryngitis from inhalation of hot steam or smoke, or the swallowing of boiling water; but I think we should admit that it is possible to have croupous laryngitis from what we call exposure to cold or atmospheric influences; in all cases the lesion being the same, but due to a different cause.

Dr. W. H. Thomson thought that the descriptions given of membranous croup by Cullen, and other English and American authors, pointed very distinctly to a disease which was much more common up to about 1826 than it has been since, and which was quite different from diphtheria, of which we see so much at present. It seemed to him that there was no mistaking the description of the disease as given by those acute observers. The impression which he had received from reading their works was that croup was of common occurrence, while diphtheria formerly was a rare affection in New York, visiting the city perhaps at intervals of thirty or forty years, just as now we have here and there an epidemic of cerebro-spinal meningitis. These facts had an important bearing upon the question as to whether diphtheria and croup were distinct diseases. At present we saw croupous laryngitis very seldom except as associated with diphtheria, but formerly diphtheria was a rare complaint, while croup occurred relatively frequently, and independent of diphtheria. Dr. Thomson mentioned one fact in which his experience differed from that of the author of the paper. He had seen at least three cases in which there was nasal diphtheria without involvement of the larynx, and he was inclined to think that nasal diphtheria occurred more frequently than was generally supposed, but it might be overlooked.

Dr. Henry R. Baldwin, of New Jersey, by invitation, said that in the course of many years' practice he had frequently seen membranous croup without any exudation upon the fauces. Again there was, about 1840, an epidemic called putrid sore throat, in which there was swelling of the tonsils with rapid septicæmia and death, but there was no mention of any exudation taking place in the trachea or larynx. There was an epidemic of diphtheria in Plainfield about 1864, during which no lesion occurred in the trachea, and there was no thought of the disease being croup. His experience agreed with the view entertained by Dr. Thomson, that formerly diphtheria occurred rarely, while croup was of frequent occurrence.

Some facts which seemed to him to have a bearing on the duality of croup and diphtheria were the following: First, according to his experience, the edge of the wound after tracheotomy did not become the seat of exudation; second, that in diphtheritic inflammation the mucous membranes were prone to hemorrhage, while there was no such tendency in croup; third, that in membranous croup death took place not from toxæmia, save from want of oxidation in the blood, while in diphtheria the toxic effect of the disease was liable to prove fatal. One's view with regard to the question as to whether diphtheria and croup were distinct diseases, would also be likely to have an important bearing upon the treatment; those who supposed diphtheria to be a distinct disease of an asthenic nature would be likely to adopt a supporting treatment and employ alcohol, etc.

As to antiseptic treatment, he found benefit from a mixture of salicylic acid and glycerine, painted over the fauces.

Dr. Winters, in closing the discussion, said that Dr. Thomson, in comparing the elimination of the diphtheritic poison to the elimination of a mineral poison, as arsenic, went contrary to his teachings in the University Medical College, where he always made a distinction between the nature of poisons, according to whether they were mineral, a form of plant, or animal, etc.

Dr. Thomson explained that it was not his intention to make such a comparison between the action of the poison of diphtheria and a mineral poison. He had said that he would as soon expect a field to eliminate the wheat which grew upon it, as that the human system should eliminate a poison which was capable of reproducing itself, like that of diphtheria, scarlet fever, etc.

Dr. Winters replied that there was no analogy between the action of the poison of a specific disease in the human system, and the growth of wheat in a field, and no comparison could be made in the matter of elimination in the two cases; for, in the one, the process was one of growth, while in the other, it was one of decay. Now, in scarlet fever, the poison was evidently being eliminated with the excretions, as they were capable of conveying the disease to the unaffected. With regard to the large doses of the tincture of the chloride of iron, they were in the habit, at the dispensary, of giving half-drachm doses hourly, and frequently two-drachm doses hourly, and in some instances two drachms half hourly, and there were several gentlemen who had seen the cases who could testify to the remarkably good results of the treatment adopted.

With regard to croup having prevailed here in past years, according to his reading, the cases which had been described corresponded clearly to diphtheria, and did not at all go to show the duality of the diseases.

With regard to the remarks made by Dr. Delafield, Dr. Winters asked whether we could compare an inflammatory process, excited in a mucous membrane by a cold, and which might extend over months, but which never terminated in the formation of a pseudo-membrane, to what is commonly understood by a croupous laryngitis? Again, there was no case on record in which a membranous inflammation of the larynx, produced by the action of steam or chemical irritants, extended down the air-passages.

Dr. Delafield—I have a specimen now.

Dr. Winters said he had examined the records thoroughly and had not found any such case, and it is stated in one of the volumes of the *British Medical*

Journal that no such case is on record. Dr. Winters also replied to some other points raised in the discussion, but which had received attention in the paper.

The Section then adjourned.

Correspondence.

OUR LONDON LETTER.

(From our Special Correspondent.)

MEDICAL SOCIETY OF LONDON—DISCUSSION ON THE DEEP REFLEXES AND THEIR CLINICAL SIGNIFICANCE—THE OPERATIVE TREATMENT OF TOTAL SUPPRESSION OF URINE—THE DEAD-LOCK AT THE COLLEGE OF SURGEONS—SCARLATINAL ALBUMINURIA AND THE SO-CALLED PREALBUMINURIC STAGE—THE WORKING OF THE CONJOINT SCHEME—A NEW UNIVERSITY FOR LONDON—THE LATE DR. W. B. CARPENTER.

LONDON, November 7, 1885.

AN important discussion on the deep reflexes and their clinical significance took place recently at the Medical Society of London. The discussion was opened by Dr. Gowers, physician to University College Hospital, who is well known as an ardent inquirer in the domains of neurology.

It has been recognized that tension on a muscle is an essential condition for the production of the phenomena in question. Dr. Gowers believes that this tension stimulates the afferent nerve fibres, and that this stimulation so influences the centres in the cord as to induce in the muscular fibres a state of slight contraction, probably the same as the physiological "tonus." In this condition local mechanical stimulation causes a sudden brief contraction. A tap on the tendon causes a sudden increase of tension, and the latter is one form of mechanical stimulation. If increased tension be maintained, the muscle, when relaxing from the first contraction, is excited to another, and so a clonus occurs. The contraction is local. The irritability is reflex, and, as it is excited by tension, Dr. Gowers prefers to call it "myotatic irritability." The muscle-reflex centres, he thinks, overact from a loss of the normal control, probably exerted by structures in the gray matter of the cord at the same level. Dr. Gowers maintains that this hypothesis enables us to explain the condition of the deep reflexes in ether- and chloroform-narcosis, and after epileptic fits. Coming next to the practical application of these phenomena, Dr. Gowers spoke first of locomotor ataxia. He believes that most instances of the alleged absence of the knee-jerk in health have been due to imperfect observation, and that its absence is of great significance as an indication of impending ataxia. The presence of the knee-jerk, though, does not, he remarked, exclude true tabes. Diphtheritic paralysis is another condition in which it is absent, and Dr. Gowers quoted Bernhardt's observation, that the loss may follow diphtheria when there has been no paralysis. If incoördination be also present, an erroneous diagnosis of tabes may be formed. In pseudo-hypertrophic paralysis the knee-jerk is ultimately lost (probably, said Dr. Gowers, from the morbid process occupying the interstitial tissue in which the afferent nerves of muscle end), a symptom of great diagnostic importance, as it distinguishes the disease from slight congenital spastic paraplegia, in which latter affection the knee-jerk is always increased. The condition of the deep reflexes in hysterical paraplegia was discussed at some length. While not denying that a true uniform clonus, such as occurs in spastic paraplegia, may occur in hysterical paraplegia, Dr. Gowers is of opinion that it is so rare that it does not lessen the value of this sign of organic disease. He believes that some cases which have been cited as cases of hysterical paraplegia have really been cases of organic disease. We must not forget, he said, that true spastic paraplegia may be recovered from. The wide use of the term "functional disease" was then referred to. Dr. Gowers thinks that in many cases so described there is a change in the nutrition of the nerve elements, and this, springing perhaps from functional derangement, maintains and increases that derangement. "Functional diseases" he considers better described as "nutritional diseases." In cases of hysterical paraplegia in which there is a persistent change in myotatic irritability, there must be a change in the nutrition of the cord, and Dr. Gowers remarked that a case recorded by Charcot seems clearly to prove that a paraplegia, purely hysterical at first, may pass on into lateral sclerosis.

Dr. Hughlings Jackson then spoke. He referred to his own hypothesis that increased knee-jerk and foot-clonus, in cases of hemiplegia from destructive cerebral lesion, were owing to loss of cerebral control. He seemed disposed to accept, in addition, Dr. Gowers' theory of local spinal inhibitory centres. The current hypothesis, said Dr. Jackson, will not account for increased knee-jerk and foot-clonus in some cases of post-epileptiform paralysis. Dr. Jackson said the condition of the deep reflexes after epileptic fits was a matter of serious import in the analysis of the wide symptomatology of epilepsy. Foot-clonus after epileptic fits was, he thought, an illustration of the principle of "loss of control" enunciated some years ago by the late Dr. Anstie.

Dr. Buzzard expressed his concurrence with Dr. Gowers in considering absence of the knee-jerk as being always pathological. Its apparent absence in many cases he considered explicable by imperfect methods of examination, and referred to some more exact methods of determination brought forward by himself and others. Absence of knee-jerk, occurring in the course of acute or subacute disease, may, he said, be due to anterior poliomyelitis, diffuse myelitis, neuritis, or spinal meningitis involving the anterior or posterior roots, or both. He had never known it lost as the result of hysteria. It was very commonly absent in the form of multiple neuritis which was apt to follow diphtheria. The knee-jerk was often lost for many hours in severe cases of cerebral hemorrhage, and perhaps also in thrombosis. Its loss pointed to the case being grave. The return of a lost knee-jerk in cases of poliomyelitis, diffuse myelitis, neuritis, and spinal meningitis was of favorable import. Dr. Buzzard said that the knee-reflex when lost in tabes dorsalis was not, in his experience, regained. Bouchard found it absent in nineteen out of sixty-six cases of diabetes mellitus, and Dr. Buzzard has found it absent in three cases of that disease. Excess of deep reflexes signifies that the inhibitory influence of the higher centres is no longer being normally excited. In Dr. Buzzard's experience, the greatest excess is to be found in cases of compressive lesion of the cord, as from Pott's disease. Caries of the lower dorsal vertebræ, however, would probably lead to total absence of knee-jerk from disorganization of the cord in the lumbar enlargement. Excess of reflex and ankle-clonus occurring in the course of spastic paraplegia of apparently protopathic origin was permanent, and the prognosis of such cases extremely bad. But if secondary to a localized lesion in the cord they might disappear, and the power of the limbs return. Ankle-clonus and, at the same time, total absence of knee-jerk in a limb often pointed to disseminated sclerosis. Dr. Buzzard said that, in his experience, the occurrence of true ankle-clonus, while always suggestive of organic disease, was not a proof of it. He had seen ankle-clonus (indistinguishable from that of lateral sclerosis) in many cases of hysterical paraplegia in which, on recovery, it disappeared. Exaggerated supinator reflex occurring a month or two after a hemiplegic seizure was, he remarked, of very bad prognosis as regards recovery of power; occurring in the course of epileptiform seizures, it had by no means the same importance.

Dr. Althaus referred to the frequency and importance of the absence of the light reflex in locomotor ataxia as an additional diagnostic feature of that affection, and de-

scribed two cases at some length. In these Dr. Althaus maintained that the pupillary symptoms showed that locomotor ataxia was not simply a disease of the posterior columns of the cord. He then went on to speak of the exaggeration of the deep reflexes in tetany. This consisted of a succession of attacks of tonic spasm or rigidity invading certain groups of muscles, especially the flexors of the hands and arms, followed by free intervals, and unaccompanied by loss of consciousness. The diagnosis of this affection was not always easy. In general, Trousseau's symptom (the production of spasm by compression of the limbs) was relied on, but a readier test was the behavior of the deep reflexes—more especially of the portio dura. A slight tap in the neighborhood of the stylo-mastoid foramen would cause all the facial muscles on that side to contract. Dr. Althaus said he distinguished three types of exaggerated reflexes, viz.: the cerebral, the spinal, and the muscular. In the cerebral type the response was quick and very extensive, so that the leg was thrown forward a considerable way. This type occurred in various lesions of the brain, particularly softening and tumor; also in some cases of epilepsy, and in most cases of hemiplegia from hemorrhage into the corpus striatum, or embolism of the middle cerebral artery. The spinal type was distinguished by an exceedingly quick and jerky motion of the leg, not nearly so extensive as in the cerebral type. Exaggerated reflexes of this type were seen in some forms of spastic spinal paralysis, of insular sclerosis, in certain combined system diseases of the spinal cord, and also in persons injured in railway accidents. Dr. Althaus remarked, in conclusion, that an excessive exaggeration of the deep reflexes in the palsied limbs in hemiplegia, with normal reflexes on the other side, pointed to a syphilitic origin of the affection.

The discussion then terminated, Dr. Angel Money's paper being taken as read, owing to the lateness of the hour.

A case of total suppression of urine has lately been successfully treated by operation at Guy's Hospital. The patient was a woman, from whom Mr. Clement Lucas successfully removed the right kidney about four months ago. The secreting structure of the organ removed was found to be totally destroyed by large calculi and hydronephrosis. After a complete recovery she was suddenly seized, about a fortnight ago, with pain in the region of the left kidney, which was quickly followed by suppression of urine, headache, and vomiting. She was brought to London, and again admitted into Guy's Hospital. After diuretics had been tried without benefit, the patient becoming more weak and drowsy, Mr. Lucas cut down on the kidney and removed a conical stone from its pelvis. A free flow of urine took place through the wound, the vomiting and drowsiness ceased, and by the last accounts the patient is doing well.

LONDON, November 13, 1885.

THE controversy between the Members and Fellows of the College of Surgeons and the Council of that institution has reached another stage. At the general meeting of Members and Fellows held on October 29th, resolutions in favor of reform and of the representation of Members were carried by a large majority. The Council have since (yesterday) held a meeting to consider these resolutions. As only one member was absent the meeting may be regarded as practically representing the whole body. The result of their deliberations may be summed up in two words — *non possumus*. They deliberately refuse what is asked from them. "It is not," they say, "desirable to diminish the privileges of the Fellowship of the College by depriving Fellows of the exclusive rights of electing to the Council," and they consider that it is "quite impracticable" to act upon the second resolution passed at the meeting of Fellows and Members, which was to the effect that no alteration in the constitution, by-laws, etc., of the College should be effected without the consent of the Fellows and Members convened to discuss the same. On these two points, be it observed, the Council were yesterday unanimous. It speaks badly for the good faith of those who were elected to the Council pledged to support the cause of reform, that they should now be as active in opposing it as those who were known as firm supporters of the *status quo*. Were the term of office of Members of the Council limited to three instead of eight years, probably some of these gentlemen would not proceed to eat their own words with such unblushing eagerness. There is, however, no probability of the matter being allowed to rest now. The Fellows and Members are not likely to accept the decision of the Council. Their case, too, is much stronger than it was, inasmuch as many of the Fellows are now disposed to make common cause with the Members. At the adjourned meeting of Fellows and Members, which is to take place next week, a further development of the controversy will probably take place.

At the last meeting of the Royal Medical and Chirurgical Society, Dr. Stevenson Thomson read an interesting paper on "Scarlatinal Albuminuria and the Pre-albuminuric Stage." Dr. Thomson had observed one hundred and eighty cases during a year, and tested 35,000 specimens of urine. As the result of his investigations, he accepts the view that nephritis is almost as essential a feature of scarlatina as the eruption or the sore throat. As regards the pre-albuminuric stage, his opinions differ somewhat from those which have hitherto prevailed, and which have been based chiefly on the investigations of the late Dr. Mahomed. Dr. Thomson has demonstrated the presence of albumen in this stage. In the subsequent discussion, one of the speakers objected to picric acid as a test, and also to potassio-mercuric iodide, both of which, he thought, might be misleading in their delicacy. Dr. Thomson, however, explained that he based his views mainly on the results given with heat and nitric acid in concentrated specimens of urine, and did not rely solely on the picric acid test. He had found both albumen and hæmoglobin in the pre-albuminuric stage, and had also found both of them in the post-albuminuric stage. He had also demonstrated the presence (in both stages) of blood-corpuscles and of casts. He considered the guiacum test a more delicate test for blood than the spectroscope, an expression of opinion in which Dr. Dickinson concurred.

Mr. Owen Fowler remarked that he had seen nearly 2,000 cases of scarlet fever at the London Fever Hospital. Dr. Dickinson considered cold to be an occasional cause of albuminuria, but at the London Fever Hospital they had more albuminuria in summer than in winter. He had found much albuminuria due to high temperature in the disease.

The new "Conjoint Scheme" has scarcely got into working order before there is a cry that it is impracticable. At the October examination it is reported that four-fifths of the candidates were rejected, and loud has been the outcry among the teachers in consequence. The new scheme will probably lead to what will virtually be a lengthening of the curriculum, viz., students will be required to pass the examination in science before commencing their medical course of four years.

The course taken by the two colleges, with reference to the "degree" question, points to the near establishment of a new university in London in close connection with the teachers in the various London colleges. The medical colleges will probably form its nucleus, and will probably give their active support to the promoters of the new Teaching University. The present London University has, in convocation assembled, deliberately refused to meddle with teaching, but to continue to be simply a State Examining Board.

I have to record the death (through an accident) of Dr. W. B. Carpenter, well known as a physiologist, both as a writer and investigator. He was perhaps equally

well known to a wider circle as the indefatigable Registrar, for twenty-two years, of the University of London. Dr. Carpenter took a deep interest in the working of the University, and any word he heard said against it he resented almost as if it were a personal offence. He was strongly opposed to the admission of women to degrees, and resigned his appointment as Registrar in the same year (1878) in which the new charter was granted to admit them. He subsequently, however, consented to serve on the Senate.

OUR PARIS LETTER.

(From our Special Correspondent.)

CONCERNING M. PASTEUR'S INOCULATIONS FOR HYDROPHOBIA—THE EFFECTS OF COLCHICIN—DEATH OF BAILLIÈRE, THE MEDICAL BOOK PUBLISHER.

PARIS, November 13, 1885.

THE debates on cholera have been quite eclipsed, and the so-called Ferranization has been thrown in the shade and greatly distanced, by M. Pasteur's inoculations for hydrophobia. You will have seen and heard, from the medical and lay press, of the discussions that have been going on on the latter subject, so that it will not be necessary for me to repeat them here. I may, however, observe that, notwithstanding the great enthusiasm that has been caused by this would-be discovery, I do not think that M. Pasteur's reputation will be thereby greatly enhanced. The intrepid experimenter seems to have had it much his own way both at the Academy of Sciences and at the Academy of Medicine, though at the latter M. Jules Guérin, the veteran member, questioned the significance of M. Pasteur's experiments and suggested that the pretended cures effected by M. Pasteur's method were no cure at all, as indeed there was nothing to cure, inasmuch as neither the animal that bit nor the subject that was bitten has ever proved to be rabid. At the last meeting of the Sanitary Congress, and in the Section of the Veterinary Surgeons of France, of which M. Pasteur was elected honorary president, the theories of the learned biologist were not received with much favor. The debate on hydrophobia was opened by M. Pasteur, but it cannot be said that much light was thrown on the subject. To begin with, the diagnosis of this terrible affection seems to have been rendered more obscure than ever, for no member present, not even excepting M. Pasteur, was able to furnish positive signs or symptons of the disease, whether in the living or dead subject, and M. Pasteur's response to a question on this point is worth noting. He stated that till now rabies could not be diagnosed with any scientific certainty in the dead or living animal, and that the fact alone of the presence of substances in the stomach of a dog other than those he had taken for his food, will not authorize one to conclude that he was mad. One single experiment would be decisive, and that is inoculation! This is certainly a sorry admission to make, and yet in the face of this uncertainty M. Pasteur goes on inoculating all subjects brought to him and reputed to have been bitten by a mad dog.

The inoculation consists in taking a fragment of the medulla oblongata or of the cerebral substance of an animal suspected to be rabid, and injecting this hypodermatically into another animal. If in the space of a few days the inoculated animal dies, this would be evident proof that the animal which furnished the product of inoculation was mad. It is not, added M. Pasteur, in the saliva, as is generally believed, that the rabid virus in its purity must be sought for, the saliva contains too many impurities for this. Moreover, it has been experimentally shown that rabies is developed not in the blood or lymph, but it is exclusively in the nervous system that the rabic virus is localized and concentrated; therefore the animal should not be killed prematurely, but allowed to die naturally, in order to make sure that the rabic virus had time to reach the spinal marrow and medulla oblongata, and there to localize itself. M. Pasteur concluded his discourse with the remark that it was not only because foreign substances were found in the stomach of the dog that bit the boy Meister—M. Pasteur's first human subject, and who it will be remembered was inoculated by him in July last—that the latter inferred the existence of rabies, but it was because the medulla oblongata of this dog, inoculated into other animals, transmitted the disease. In the present stage of our knowledge of this supposed cure for hydrophobia, I think it would be premature to practise these inoculations, particularly as it is known that, of a hundred persons bitten by dogs known to be really rabid, ninety have escaped the disease. Moreover, the stage of incubation is so variable, extending as it does from about a fortnight to several months and even years, it would be often difficult, if not impossible, to trace the connection between the time of infection and the outbreak of the symptoms. Under these circumstances it would be advisable not to trust to these anti-rabic inoculations, but to resort without delay to the time-honored remedy, the actual cautery, as again recently advocated by the Council of Hygiene of Paris.

The law of July, 1881, prescribes that all dogs even suspected of being mad shall be destroyed. One of the members present protested against this law as being too arbitrary, and went so far as to say that, if carried out, it might be compared to the massacre of the innocents (?) M. Nocard, a veterinarian of some note, as if to give some satisfaction to the scruples of the speaker, proposed to make over all edible animals—such as oxen, cows, sheep, &c.—that might have been bitten by a rabid dog to the butcher for sale, declaring that there is no danger whatever in handling or consuming meat contaminated by rabic virus. This proposition raised a storm among the audience by way of protesting against it, when one of the members, as soon as silence was restored, put the question as to who would dare to affirm that meat contaminated by rabies could be consumed without danger. At this question another member stepped forward and declared that such meat was absolutely inoffensive, and added that he spoke from personal experience, having eaten not only once but a hundred times, cooked or raw, of the flesh of rabid cows and farcinous horses. This caused a murmur of horror among the audience, and one of the members exclaimed that fortunately the public are protected by an article of law which formally interdicted the sale for consumption of the flesh of animals killed on account of some contamination or other.

The recent trial of a florist, accused on suspicion of having poisoned his wife with colchicin, but who was acquitted, as no positive proof could be brought against him, has induced experimenters to discover some means by which the presence of this alkaloid may be detected in the system. M. Laborde lately presented a note at the Société de Biologie on the physiological effects of colchicin that he observed in guinea-pigs, dogs, and rabbits. It is said that a dose of one centigramme determined a commencement of poisoning, characterized by nausea and vomiting. And yet it has been recorded that a patient had taken by mistake forty centigrammes of this alkaloid without having been poisoned, and without having felt any other inconvenience than a little diarrhœa, syncope, and headache. Another patient took as much as one gramme in a single dose, and only presented analogous symptoms. It is, however, worthy of remark that a gouty patient is relieved in his arthritic joints at about the fifth or sixth granule of one milligramme each, after slight vomiting and a little diarrhœa. There is a well-known patent medicine called "La Liqueur de Colchique de Laville," which is a popular remedy in this country for gout, and by the administration of which the same physiological and therapeutic effects have been noticed.

M. J. B. Baillière, the well-known medical bookseller in Paris, died on the 8th ult., in the eighty-ninth year of his age. From his age he was called the "doyen" of the medical booksellers of this country. He was a great favorite among the members of the profession, and although he became blind in the latter years of his life, he never quitted his business.

REPLY TO DR. DUGGAN.

To the Editor of The Medical Record.

Sir: Out of consideration for your readers and for my time I shall reply as briefly as possible to Dr. Duggan's remarkable communication, published in The Medical Record of September 12th. The facts are as stated in my letter of August 1st, and I leave the profession to judge of the value of Dr. Duggan's criticisms, and of the propriety of his publishing them under the circumstances mentioned.

Dr. Duggan says that he gave up work for the Committee on Disinfectants in January. It is true that at the end of January I informed him that the funds at my disposal would not permit me to continue to pay him for his services; but it is also true that he promised to make some additional experiments without compensation, and that I was in daily expectation that he would resume his experimental work for the committee up to the time that I decided to place the further testing of commercial disinfectants in the hands of Dr. Abbott.

In attempting to justify his action, Dr. Duggan says: "Perhaps my principal reason for not communicating directly with Dr. Sternberg was that I felt convinced that any criticism made in this way would not reach the profession. I know that this statement requires explanation, which I can only give by citing a past experience."

When the facts relating to this "past experience" are fairly considered, it will be seen that this attempt to impeach my scientific accuracy and honesty is simply ridiculous.

The criticism made by Dr. Bartholow, to which Dr. Duggan refers, arose from a misapprehension which was fully explained in my paper on potassium permanganate, published in the *Medical News* of January 10, 1885. This will be made apparent by the following quotation from this paper:

"Continuing to quote from Bartholow, we find the following:

"'We must acknowledge a certain sense of scepticism in examining these experiments of Dr. Sternberg, as able and well-considered as they unquestionably are. We find it difficult to understand why liquor zinci chloridi has no germicide action, whilst a two per cent. solution of the same is effective in the proportion of one part to fifty.'

"Dr. Bartholow's scepticism is well founded from his point of view, but it results from a misapprehension. I do not say that liquor zinci chloridi has no germicide action, but I record its failure to destroy the micrococcus used as a test-organism in the following experiments: Commencing at one per cent.—the time of exposure being, as in all of these experiments, two hours—and meeting with a failure, the following experiments were made, two per cent., four per cent., eight per cent. Meeting with a failure in every case, I proceeded to test the pure salt—zinc chloride. This failed in the proportion of 0.5 per cent. and of one per cent., but was successful in the proportion of two per cent. (Experiment in duplicate, see Table No. I.). In my Table No. II. this result is stated as follows:

"'Zinc chloride (two per cent.) one part in fifty.'

"The misapprehension has arisen from the fact that Professor Bartholow has taken this to mean that one part in fifty of a two per cent. solution is efficient, whereas it means that one part in fifty of the pure salt is efficient, and the two per cent. in parenthesis is simply introduced from the previous table as the equivalent of one part in fifty.

"According to the National Dispensatory, the liquor zinci chloridi should contain about fifty per cent. of the pure salt. If the specimen tested was of this strength, it should have been efficient in the proportion of four per cent., or 1:25; but it failed in two experiments in this proportion, and in one in the proportion of eight per cent. The biological test is sufficiently accurate to make it appear probable that this particular specimen did not come up to the standard."

My inference that *this particular specimen* was below the standard of strength is fully justified by a comparative test made at the same time, by the same method, and upon the same organism—a micrococcus—with a solution made from the pure salt. Dr. Duggan testing a different sample of the solution two years later, and upon different test organisms—the bacteria of putrefaction in broken-down beef-tea—and finding by chemical analysis that this sample contained fifty per cent. of zinc chloride, assumes that the sample tested by me in 1883 also contained the same amount, and has the presumption to say that having informed me of the fact he has "waited in vain" for me to "publicly correct" my error. This, as already stated, is simply ridiculous. I know nothing of the history of the sample tested by me which I found upon the shelves of the Post Hospital Dispensary at Fort Mason, Cal., and in recording my results in a table in my paper referred to, I had no intention of reflecting upon the fair fame of Dr. Squibb, whose label was upon the bottle. I simply recorded the results which I had obtained. In the same way I have recorded Dr. Duggan's results, in testing another sample, in the paper on commercial disinfectants. I do not doubt that Dr. Duggan's sample contained fifty per cent of zinc chloride, for he determined this by chemical analysis. I do not doubt that the sample examined by me contained less than fifty per cent. of zinc chloride, because in carefully conducted experiments I found that it failed to kill micrococci in eight per cent. solution, while the same organism was destroyed by a two per cent. solution of the pure salt.

Dr. Duggan's second specification is as preposterous as the first. In my letter of August 1st I make the statement that Dr. Duggan's experiments were made at the expense of the Committee on Disinfectants and by my method. This simple mention of my method leads Dr. Duggan to say that "Dr. Sternberg speaks of his method as though he had a proprietary right in it," and to suggest that I should "take out a patent." As a matter of fact I have frequently demonstrated my method of testing disinfectants to visitors to the laboratory in Dr Duggan's presence, and have published a full account of it in my paper already referred to (*American Journal of the Medical Sciences*, April, 1883).

Dr. Duggan further says: "If better proof is needed to show that he considers his method of the cultivation of bacteria private property, it lies in the fact that during this work he required a 'trusted assistant' to promise that if his services were asked for by a certain distinguished investigator he would not give them, as that gentleman was anxious to secure some one acquainted with his methods of work, and thus do work for which he (Dr. Sternberg) ought to have the credit."

This statement is based upon what Dr. Duggan overheard of a confidential conversation in the laboratory, in which I asked Dr. Abbott to promise not to leave me in less than a year, in case he had an offer which was more advantageous in a pecuniary point of view. This request was in no way based, as suggested by Duggan, upon a desire to prevent others from using my methods, but was founded simply upon my desire to retain the services of a gentleman who had proved himself especially apt at mastering technical details. As Dr. Abbott was receiving compensation for his services while still a beginner in bacteriological work, I thought it not unreasonable

to ask that he should give me, for a certain time, at the same compensation, the benefit of the technical skill he was acquiring in work carried on under my direction, and that he should agree not to leave me on short notice in case he was offered a more remunerative position in another laboratory.

This reasonable desire to retain the services of a skilled assistant induced me to ask Dr. Abbott to give me the promise referred to by Dr. Duggan, who happened to be in the laboratory at the time of my confidential conversation with Dr. Abbott.

Dr. Duggan's statement that one of the members of the Committee on Disinfectants intimated to him that a contribution to the funds of the committee by the firm of manufacturing chemists, in whose employ he was, would be acceptable, I believe to be without foundation. Certainly I never made such a suggestion to him or to any one else.

Dr. Duggan persists in misinterpreting the plain directions given in regard to the disinfection of privy vaults and says: "Any one having read the report of the committee will see that there is no intimation that mercuric chloride should be dissolved before it is placed in vaults; and, in fact, this looks very much like an after-thought on the part of the chairman of the committee." The members of the committee can all testify that this is not true, as any one who can understand plain English may see for himself in the following quotation from the preliminary report: "Disinfection may be accomplished either with corrosive sublimate, or with chloride of lime. The amount used must be proportioned to the amount of material to be disinfected.

"Use one pound of corrosive sublimate for every five hundred pounds—estimated—of fecal matter contained in the vault, or one pound of chloride of lime in every thirty pounds.

"Standard Solution No. 4, diluted with three parts of water, may be used. It should be applied—the diluted solution—in the proportion of one gallon to every four gallons—estimated—of the contents of the vault.

"If chloride of lime is to be used, one gallon of Standard Solution No. 1 will be required for every gallon—estimated—of the material to be disinfected.

"All exposed portions of the vault, and the woodwork above it, should be thoroughly washed down with the disinfecting solution."

As the final report of the Committee on Disinfectants is now ready for presentation at the next meeting of the American Public Health Association (in December), I must decline to give any more time to the discussion of the recommendations made in the preliminary report, which was made by special request of the Sanitary Council of the Mississippi Valley, in anticipation of a possible epidemic of cholera.

GEORGE M. STERNBERG,
Major and Surgeon, U.S.A.

BERLIN, October 27, 1885.

TINCTURE OF COBWEB.—Dr. W. G. Macdonald, of this city, sends us the following formula for the preparation of tincture of cobweb, as desired by a correspondent. "A bunch of spider-web collected from a dark cellar, about the size of a large walnut, is put in about four ounces of whiskey and allowed to macerate forty-eight hours, and then filtered. A teaspoonful is taken about four hours before the expected chill, and at hourly intervals, until four doses are taken, and then a dose before each meal and at bedtime, until all is taken." The web of a species of spider which inhabits dark places is supposed to possess the best medicinal properties.

A NEW PROTECTION FOR VACCINATION SCABS.—Bunion shields are said to be in great demand for the protection of vaccination scabs. Happily this novel use of the shield is calculated to afford relief to the dealer's pocket as well as the purchaser's arm.

Army and Navy News.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from November 15, 1885, to November 28, 1885.

HEGER, ANTHONY, Major and Surgeon. Member of the Army Medical Examining Board now in session in New York City, is relieved from the additional duty of Attending Surgeon in that city, to take effect when Lieutenant-Colonel Joseph R. Smith, Surgeon, shall have arrived in New York and entered upon that duty. S. O. 267, A. G. O., November 19, 1885.

ELBERRY, F. W., Captain and Assistant Surgeon. Sick leave of absence further extended six months on surgeon's certificate of disability. S. O. 263, A. G. O., November 14, 1885.

STRONG, NORTON, Captain and Assistant Surgeon. Relieved from duty at Fort Union, N. M., and ordered for duty as Attending Surgeon, Headquarters District of New Mexico, and Post Surgeon, Fort Marcy, N. M. S. O. 171, Department of Missouri, November 16, 1885.

EWING, C. B., First Lieutenant and Assistant Surgeon. Now at Fort Leavenworth, Kan., ordered to proceed to Fort Reno, Ind. T., and report to Commanding Officer for temporary duty in the field. S. O. 170, Department of Missouri, November 13, 1885.

WINNE, C. K., Captain and Assistant Surgeon. Assigned to duty as Post Surgeon, Benicia Barracks, and Attending Surgeon at Benicia Arsenal, Cal. S. O. 109, Department of California, November 20, 1885.

REED, WALTER, Captain and Assistant Surgeon. Granted leave of absence for one month, with permission to apply for one month extension, to take effect about December 1, 1885. S. O. 114, Department of the Platte, November 18, 1885.

TAYLOR, ARTHUR W., Captain and Assistant Surgeon. Granted leave of absence for one month, to take effect December 5, 1885. S. O. 116, Department of the Platte, November 20, 1885.

CHAPIN, A. R., First Lieutenant and Assistant Surgeon. Ordered for temporary duty at Fort Robinson, Neb. S. O. 115, Department of the Platte, November 18, 1885.

SIMONS, JAMES, Lieutenant-Colonel, U. S. A., retired, died November 11, 1885, at Baltimore, Md.

Official List of Changes in the Medical Corps of the United States Navy for the week ending November 28, 1885.

DRENNAN, M. C., Surgeon. Ordered to Training Ship New Hampshire.

NICK, H. A., Surgeon. Detached from Training Ship New Hampshire and wait orders.

FITTS, H. H., Assistant Surgeon. Ordered to appear before Examining Board preliminary to promotion.

RUSH, C. W., Passed Assistant Surgeon. Granted sick leave for three months from November 20, 1885.

MARMION, R. A., Surgeon. Detached from Marine Barracks, Washington, D. C., December 7th, and wait orders.

MOORE, A. M., Surgeon. Ordered to Marine Barracks, Washington, D. C., December 7, 1885.

THE FIRST CONGRESS OF SWEDISH PHYSICIANS was held in Jönköping on September 3, 4, and 5, 1885. Among the subjects discussed were the best means of preventing the introduction of epidemics into cities and rural districts, and the treatment of diphtheria by cyanide of mercury. Among the papers read were one by Dr. Westermark on Salpingitis, by Dr. Ivar Svensson on the Radical Operation for Hernia, by Dr. Warfuinge on Antipyresis, and by Dr. Sven Bayer on Bacteriological Studies in Relation to Cholera.

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BOSTON CITY HOSPITAL

Original Articles.

A SUCCESSFUL CASE OF NEPHRECTOMY FOR CALCULOUS PYELITIS.[1]

BY FRANCIS J. SHEPHERD, M.D.,

PROFESSOR OF ANATOMY IN M'GILL UNIVERSITY, SURGEON TO THE MONTREAL GENERAL HOSPITAL.

EXTIRPATION of the kidney, though now an operation of comparative frequency, is of such recent origin that surgeons are not yet agreed, either as to the cases in which it is justifiable or as to the proper method of its performance. Most of the advocates of the abdominal operation are specialists in abdominal surgery, while the verdict of the general surgeons is largely in favor of the lumbar operation. As, in the large majority of cases, the surgeon is unable to say till the kidney is reached, whether nephrotomy or nephrectomy should be performed, and even abdominal surgeons admit that the lumbar incision is the most suitable for nephrotomy, it seems to me that this reason alone should strongly influence us as to the choice of operation. The lumbar operation is, without doubt, the safest operation in the hands of surgeons who are not specialists in abdominal surgery, notwithstanding all that is now said about the "traditional fear" of opening the peritoneal cavity, being a ghost of the dark ages of surgery which has been effectually slain.

Extirpation of the kidney for calculous pyelitis has been a particularly fatal operation, especially when undertaken in advanced cases of the disease. The mortality has been so great that it has been advised by many that a preliminary nephrotomy should, in all cases, be performed; others, again, strongly recommend drainage of the kidney alone, in cases where the organ is in an advanced stage of suppuration, and when it is surrounded by such an amount of cicatricial tissue as would render its removal a hazardous procedure.

The following case of nephrectomy for advanced calculous disease is, I trust, not without interest, and adds one more case to the list from which the rules governing renal surgery will, in the future, be formulated.

I am indebted to Dr. Gustin, my house-surgeon, for the history of the case.

Eliza T——, aged twenty-four, married, was admitted into the General Hospital under Dr. Wilkins, on August 10, 1885, suffering from a painful swelling in the left side of the abdomen. Family history throws no light on the case; no consumption. Has had two children and one miscarriage. She recovered rapidly from her first confinement, but convalescence was tedious after the second. Up to two years ago was always a very healthy woman. She dates the commencement of her illness from nine months ago, when she began to lose flesh and to suffer pain in the left lumbar region, pain occasionally reached as far as the thigh. She attributed these pains to the pressure of the pregnant uterus. She first noticed a "lump" in the left side of her abdomen two years ago, after the birth of the first child; it was movable, tender on pressure, but not painful. It gradually increased in size, and became painful. Five months ago she noticed that her urine was milky, and that if it stood for a short time a considerable deposit appeared. Occasionally the urine would be quite clear for two or three days, and then there would be a large amount of deposit. She never had anything resembling blood in the urine, nor had she ever had any attack at all like renal colic; never had had any chills or sweatings.

On admission into hospital, the following note was made concerning her condition: "Patient extremely emaciated and anæmic, with an anxious expression of countenance; skin dry, of a sallow hue, and hangs loosely over the tissues; tongue red and flabby; bowels regular; no cough; lungs on examination are found perfectly healthy. Patient is very weak; has a pulse of 140, and temperature, 101° F.

"Has painful and frequent micturition, and complains of pain in the lumbar region which shoots occasionally down as far as the thigh.

"*Abdomen.*—On examining the abdomen, the superficial veins are seen to be much enlarged on both sides, as if there were some deep-seated obstruction. A distinct fulness is seen in left lumbar and iliac regions. Palpation reveals a large tumor extending across to within an inch of the umbilicus, continuous with the splenic dulness above, and below reaching as far as the brim of the true pelvis. By bimanual palpation the tumor can be grasped between the hands and moved slightly. No fluctuation made out, but tumor feels very elastic, and on pressure it is very tender. Urine has a specific gravity of 1.020, is slightly acid, and after standing a few minutes deposits a large amount of pus. On microscopic examination no casts are found, but pus-globules and oxalate and phosphate crystals are seen in abundance."

In the last week of August, Dr. Wilkins transferred the patient to the surgical wards, where she came under my care. At that time her condition was somewhat improved, she had gained flesh, but was still greatly emaciated. Her pulse, however, was still rapid (140), and her temperature ranged from 99° to 101.5°. The tumor had not increased in size since her entrance.

The diagnosis of the case rested between tuberculous and calculous pyelitis. The history of the case pointed, however, rather to the latter affection, on account of the pain, occasional absence of pus in urine, and the absence of any phthisical history; on the other hand, there had never been any blood in the urine.

The condition of the patient not improving, the pulse remaining at 140, and the temperature sometimes running up as high as 103° at night, after consultation with my colleagues I decided to explore the left kidney through a lumbar incision, and to perform nephrotomy or nephrectomy, as would be determined by the condition of affairs found on reaching the kidney.

Operation.—On September 17, 1885, the patient having been etherized, the right kidney was first examined by palpation, and easily made out to be normal in size and apparently healthy. It was freely movable. The woman was now placed on her right side, in the colotomy position, with a pillow under her right loin. An incision was made, a little nearer the rib than the iliac crest, from the edge of the erector spinal muscle, downward and forward for nearly six inches. There was plenty of room between the last rib and crest of the ilium, the distance being somewhat greater than usual.

After dividing the various structures, the quadr lumborum muscle was reached, and its most exte fibres were divided transversely, so as to give more r

[1] Read before the Montreal Medico-Chirurgical Society, October 23, 1885.

posteriorly. During the dissection there was pretty free venous hemorrhage, owing to the distended state of the veins.

The kidney tumor now came into view; it was distinctly fluctuating, and on aspirating it, stinking pus was drawn off; passing the hand around the kidney in the direction of the pelvis, a hard substance was felt, which by needle exploration was found to be a calculus. An incision was now made into the most prominent part of the tumor, and nearly a pint of very fetid pus evacuated. Through this incision the kidney was explored with the finger, and a large calculus was felt filling up the pelvis and calyces of the kidney and extending down into the ureter. The kidney was converted into a large sacculated pus-containing bag as large as a fœtal head, with numerous outlying cysts with thin walls. Seeing the extent of the disease and the impossibility of removing the calculus, I forthwith decided to remove the kidney. The incision already made was found too small to satisfactorily free the kidney from the surrounding structures, so it was enlarged by incisions at right angles to the original one, about its middle. In this way plenty of room was obtained, and the whole hand could be introduced for the purpose of freeing the kidney.

The upper end was freed without difficulty from the capsule and suprarenal body, which was left behind. The lower and posterior part was not so easily separated, as there were many adhesions—in fact almost a cicatricial condition of the surrounding structures. To give still more room many of the projecting cysts were punctured and the contained pus let out; in one of these cysts a stone, the size and shape of a marble, was found.

The posterior surface of the lower end of the tumor, which extended deep down in the iliac fossa, was the most troublesome part to clear, and some hemorrhage from the engorged veins occurred during the process. The peritoneum, however, escaped uninjured. The vessels entering the hilus were now tied with a strong carbolized silk ligature, which was cut short. The vessels were then divided, and the kidney delivered through the wound with ease. The ureter was also tied, cut, and brought out as near as possible to the edge of the wound. It was of normal size, except near the kidney, and was apparently healthy. After dividing a few bands of cellular tissue about the hilus, the kidney was removed.

During the freeing of the kidney there was considerable venous hemorrhage, and much oozing continued after the removal of the organ; several bleeding points were secured and tied with catgut, and the oozing arrested by sponge-pressure. The cavity left by the removal of the tumor was almost immediately filled up by the intestines, which pushed forward the peritoneum. The wound was now irrigated with bichloride 1 to 2,000, and then brought together with catgut sutures, dusted with iodoform, covered with a pad of sublimate jute, and over all a broad gauze bandage. A large drainage-tube, I omitted to mention, was inserted into the lower end of the wound.

The patient, although suffering considerably from shock, rallied well. She had a little vomiting, which was controlled by champagne, and, for the first four-and-twenty hours, she was fed per rectum by brandy and beef-tea enemata.

During the night after the operation there was considerable oozing, and the dressings had to be changed on the second day; at this dressing the drainage-tube was much shortened. About thirty ounces of urine was passed in the twenty-four hours following the operation; it contained some blood and a small amount of pus; after the third day neither blood nor pus were found in the urine. Her pulse, which before the operation was 140, soon fell to 115, and the temperature after the first day never reached 100° F. The patient made an uninterrupted recovery, the wound healing by first intention everywhere except at the point of drainage. In two weeks she was sitting up, and in three wheeling herself about the ward in a chair. Her appetite was now enormous, and she rapidly gained flesh. By October 17th she was walking about, and looking quite healthy and strong. The daily amount of urine passed was from forty-five to fifty ounces, of a specific gravity of 1.020.

The calculus on examination proved to be composed chiefly of oxalates.

There are several points of interest in this case:

First.—The ease with which, in the patient's emaciated condition, the right kidney could be felt and recognized to be of normal size.

Second.—The large amount of room obtained by the crucial method of incision.

Third.—The satisfactory way in which, notwithstanding the advanced state of the disease and the number of adhesions, the kidney was removed without wounding the peritoneum or other important structure.

Fourth.—The rapidity with which the large cavity, caused by the removal of the tumor, was obliterated by the intestines pushing forward the peritoneum.

I feel certain that, in this case at least, the lumbar operation was the more suitable; had an attempt been made to remove the organ by abdominal section, it would have been impossible to avoid breaking the thin-walled cysts, and so allowing some of the fetid pus to get into the peritoneal cavity.

P. S., November 23d.—When last seen, a day or two ago, the patient was attending to her household duties, and feeling strong and well. There was still a sinus, large enough to admit a small probe, where the drainage-tube had been. There was very little discharge from the sinus.

MONTREAL, November 24, 1885.

OPERATION FOR CONGENITAL EXTROVERSION OF THE BLADDER OF AN INFANT FIVE DAYS OLD.

BY HAL C. WYMAN, M.D.,

SURGEON WEST END DISPENSARY, DETROIT, MICH.

IN November, 1884, I was summoned to see an infant, born of German parents, in this city. The child was four days old, and appeared in every respect healthy excepting a malformation of the genito-urinary tract. From the umbilicus down to the triangular ligament there was a want of development which caused an extroversion of the posterior wall of the bladder, showing the orifices of the ureters, also an absence of the dorsal portion of the penis from the crus to the glans. Through this large opening the posterior wall and base of the bladder with the prostate gland protruded, making a most unsightly deformity. The urine constantly dribbled away from the ureters, soiling the limbs and body of the child. The parents were unusually intelligent, and appreciated fully the nature of the deformity, and begged of me to make some effort to improve it. I decided to operate, and on the day following, the child being five days old, with the assistance of Drs. Chuney and Clark, of this city, the child was given chloroform and the mucous membrane removed in a strip one-half inch wide, running around the margin of the vesical wall, where it blended with the integument of the abdomen, excepting a small area which corresponded to the inferior wall of the urethra. Then an incision was made in each side through the integument and superficial fascia arising from Poupart's ligament, just forward of the anterior superior spine of the ilium, upward, a distance of two inches, for the purpose of securing sufficient relaxation of tissue to let the opposite pared surfaces come together and unite. The pared surfaces were then transfixed with three hare-lip pins, and a figure-of-eight ligature was passed about them, bringing the margins of the abdominal cleft in contact; additional sutures were passed between the pins

and on either side of them, securing perfect apposition of opposing surfaces. The line of union was now dusted with oxide of zinc and covered with absorbent cotton. The perpendicular incisions stretched out under the tension due to closure of the abdominal cleft, making wounds an inch in width. They were dressed with lint and cosmoline, no effort being made to close them. A small drainage-tube was left in the bladder and served to constantly drain away the urine, so that it did not come in contact with the wound. No effort was made to restore the dorsal portion of the penis or urethra, owing to the severe hemorrhage which resulted from the denudation of such a large amount of tissue as was involved in the bladder. Then the making of a useful urethra out of the redundant integument of the scrotum and penis would be a comparatively easy matter after the large abdominal cleft had been closed.

The amount of blood lost was all that the appearance of the infant would warrant us in taking. From a healthy red color it had changed during the operation to a death-like white, and this not due to simple blanching of the surface, as shown by feeble pulse, etc. After cessation of the anæsthesia the little patient revived, looked bright, and took the breast vigorously. No anodynes were necessary to control pain, and little distress seemed to follow the operation. On the third day the normal color of the child had returned, showing that out of mother's milk and fresh air sufficient red blood had been manufactured to compensate for the large amount lost during the operation. The child progressed rapidly to recovery and a perfect union of the surfaces apposed by sutures. It was my intention to make a second operation for the restoration of the urethra and dorsal portion of the penis, when, two months later, the child was attacked with convulsions, which terminated fatally, but had no apparent cause in the conditions leading to or growing out of the operation for cure of the extroverted bladder.

There are two points in this case which the writer deems especially worthy of the attention of the profession. One is the early age at which the operation was performed, and the second is the facility with which the child rallied from shock and hemorrhage. The good results which have followed the early performance of hare-lip operations in the writer's hands (in several instances the third day after birth), and the excellent union and relief of deformity in the present case, lead him to advocate early resort to operative measures in all cases of congenital extroversion of the bladder.

THE SEPARATION OF MATERIA MEDICA AND THERAPEUTICS.—Professor Horatio C. Wood, of Philadelphia, writes: "In your issue of November 21st is a letter from Dr. Mary Putnam-Jacobi, in which attention is called to the separation of the materia-medica course from that of therapeutics in the Woman's Medical College of New York, and the assertion made that such separation 'is an entirely original one and entirely peculiar to our school.' The first impulse of gallantry was to leave Mrs. Jacobi and her self-congratulations undisturbed; but justice seems to require the statement that in the University of Pennsylvania such separation was made as long ago as 1878, and has been fully carried out ever since. The first year of the student is occupied in part by a course of laboratory instruction in practical pharmacy and in the study of pure materia medica, and he is required to pass an examination—including the putting up of a prescription—on each of these subjects before entering the second year. During the second and third years the physiological action of drugs and practical therapeutics receive the student's undivided attention.

Dr. J. M. Baldy, of Scranton, Penn., a graduate of the University of Pennsylvania, sends us a communication to the same effect.

A CASE OF PHTHIRIASIS PALPEBRARUM.

REPORTED BY FRANK W. RING, M.D.,

ASSISTANT SURGEON MANHATTAN EYE AND EAR HOSPITAL, NEW YORK.

MASTER J. K——, ten years of age, came to the Manhattan Eye and Ear Hospital, October 10, 1885, and was admitted to Dr. Roosa's clinic. Upon a hasty examination he diagnosed a case of phthiriasis palpebrarum, and kindly turned the patient over to me for a more thorough examination.

Upon the left upper lid I found three rows of cilia, and upon the right two, making a most acceptable place for a prolific reproduction of the parasite. The lids had a dirty, disgusting-looking appearance, and upon close inspection each cilium was found to be the recipient of a nit, so closely adherent that it could not be removed without pulling the lash from the lid.

The lids were thoroughly washed with a solution of soda and water, and then, by stirring up the closely adherent excrement and dirt at the roots of the lashes, two or three insects were removed which were supposedly recognized as pediculi pubis, commonly known as the crab-louse. It was quite difficult to dislodge them, as they were deeply fastened into the tissue of the lid. An application of the ointment of the red oxide of mercury was smeared over the lids, the cilia being cut close, to dispose of the nits.

In two days the patient returned with the lids looking better; but upon close inspection I found evidences of the parasite, and with a little patience removed eight insects with the cilia forceps; then, with a cotton pointed probe I applied some heated blue ointment thoroughly to the upper and lower lids, sending the boy home with the caution not to wash the eyes for three or four hours.

In three days the patient returned to the hospital, and a thorough examination was made with no apparent signs of any insect remaining; he was dismissed as cured, only to make his appearance a fortnight later, with several nits glued to the stubs of the cilia, and three insects at their roots; they were removed, a fresh application of ointment made, and the lad has not returned, so that we naturally infer he is no longer afflicted.

Dr. W. H. Fox kindly mounted some of the specimens, and I put them under the microscope to make sure of their identity. They were compared with the cuts accompanying an article in "The Royal London Ophthalmic Hospital Reports" (vol. ii., p. 125), by Mr. W. W. Harkness, and found to be of the same variety.

I also found in the same reports (vol. v., p. 239) a case of pediculi palpebrarum in a child three years of age, reported by Dr. Steffen, who had never heard of a like case before. There is no record of phthiriasis palpebrarum in Knapp's *Archives*, "Trans. Amer. Ophthal. Society," or *The Ophthalmic Review*, all of which I searched in their entirety; also portions of *The American Journal of Ophthalmology*, and "Trans. British Ophthal. Society." The records of the Manhattan Eye and Ear Hospital show a ratio of one to fifty-seven thousand.

Dr. David Webster had been looking for a case of pediculi palpebrarum for thirteen years, during which time he has probably treated over fifty thousand patients. Dr. Roosa kindly furnished the patient referred to. I infer from the foregoing facts that such cases are exceedingly rare, which is my apology for reporting this one.

How the child became affected I do not know. The mother said the boy had come from Staten Island, where he had passed the summer; also that he spent considerable time in the hen-house. The lad informed me he slept with two brothers, seventeen and eighteen years of age, which habit I stopped.

I am aware that the hen-louse is not of the pediculi pubis variety; if it was, I should attribute the infection to his familiarity with the hens.

Dr. Kipp, of Newark, had a patient who came from the country every fall with lice in his lashes.

101 PARK AVENUE.

SOME OBSERVATIONS ON THE OPERATION OF TRACHEOTOMY IN CROUP, AND ITS AFTER-TREATMENT.

By SAMUEL KOHN, M.D.,

NEW YORK.

It is significant that, after all that has been said and written in favor of the operation of tracheotomy in the croup of children, there should still be a number of physicians of large experience who deny its beneficence.

It is the aim of the writer to look into some of the causes for this skepticism; to describe some of the dangers which, in his experience, have beset the unfortunate little patient after the operation has been performed, and the steps he has taken to avoid or palliate them.

It is not to my purpose to quote statistics, to discuss the merits of canulas, or to cite the literature of the subject. Exhaustive articles on tracheotomy in croup are to be found in the files of the medical journals of every language for the last decade, and in text-books.

The mention of the names of König, Krönlein, Kuster, Meigs and Pepper, Jacobi, and Ripley, calls to mind only a few of the excellent contributions to our knowledge of the subject.

Having performed the operation in ten cases, I desire to present the result of my observations, and possibly to gain a convert or two from the ranks of the non-believers.

Much has been said of the "early" and "late" operations in croup, and many a patient has died asphyxiated, because his physician, under the influence perhaps of the last article on the subject he has read, advocating only "early" operation, thought the disease too far advanced for any operative procedure to be of benefit. To such prevaricators Krönlein and Jacobi say, in effect, "it is never too late to operate, no matter how deep the carbonic acid intoxication, how severe the disease, or how young the child; that humanity compels the physician to perform that operation which will cause oxygen to reach the lungs; that, in short, when it becomes evident that the *principal danger* from which the child is suffering is *laryngeal obstruction*, no consideration whatever should prevent the performance of the operation."

The writer has among his cases two in which tracheotomy was deferred until the cyanosis had reached apparently the highest possible degree, and both of these patients recovered.

The first of these, a boy, two years and three months old, when seen for the first time, August 30, 1883, at eight o'clock in the evening, with Dr. Althaus, of this city, presented all the symptoms of membranous croup: a temperature of 103° F., retraction of the soft parts of the chest on inspiration, hoarse and at times aphonic cough, noisy laryngeal respiration. Immediate tracheotomy was advised, but the mother of the child, who was here on a visit from Cincinnati, begged that it might be postponed until she could communicate with her family. It was told her that we might wait and try the ordinary remedies. In spite of all our efforts, the cyanosis grew deeper, until on the early morning of September 1st the operation was performed, with the kind assistance of Drs. Bell and Althaus. We told the mother that the chance of saving the child's life was minimal, that there was mild diphtheritic intoxication present, but she asked us to do anything that would give air to the child, and relieve its terrible sufferings. Although this patient was in a state of complete muscular relaxation and deep cyanosis, he was restored to health by the operation.

The second case, very similar to the one just described, was in a girl of about four years, who was *in extremis* when the operation was performed. It was a case of diphtheritic croup in the practice of Dr. Ludwig Weiss, of this city, the late Dr. C. Krog, of this city, and myself being in consultation. The patient was as limp from muscular relaxation as though inanimate; inspiration and expiration both very short from almost complete glottic occlusion; the operation was beset with such difficulties that each of the three physicians successively attempted to find the trachea, it finally falling to my lot to reach it. Notwithstanding her precarious condition at the time of operating, this patient also recovered. These cases are instanced to show that "lateness" of operation or the presence of complications does not of necessity make a fatal result inevitable. Many cases of the same kind are to be found in the literature. On the other hand, recoveries have been reported in apparently serious cases without tracheotomy; such cases only prove that the operation should not be performed until, after carefully watching the progress of the case, it becomes evident that no other resource is left.

To the "too early," or, to use slang, "too previous," operator these reported cases of recovery without operation must be a terrible reproach when his operation terminates fatally. If the croup membrane be so disposed in the larynx that, although both vocal cords be covered and the glottis narrowed, the rima still admits sufficient air to sustain life, the child can recover; and to expose it to the additional dangers of tracheotomy unnecessarily is, in my opinion, unjustifiable. A little judgment is, of course, necessary to distinguish between these cases. It has been my rule not to operate until, notwithstanding the application of appropriate remedies, the barking cough, the sawing inspiration, the hoarseness, gave place to aphonic cough, to marked interference with both respiratory acts, and to aphonia, the general symptoms becoming correspondingly marked. The physician who views tracheotomy in croup with disfavor finds himself, when confronted by a case of this disease, on the horns of a dilemma—shall he perform an early operation, to be followed possibly by the death of the patient, attributable to the tracheotomy perhaps, or shall he inflict additional suffering on the already over-tortured patient by operating "late," with the certainty, according to some writers, of a fatal result? If he will remember that at no time, until death occurs, is it actually too late to tracheotomize, he will be enabled to easily come to a decision, and to carry it into effect without trepidation.

In regard to after-treatment, the *trained nurse* is an *all-important* factor; the constant watchfulness of the nurse who thoroughly understands the methods of combatting the ever-recurring emergencies in these cases will serve to relieve the physician of much anxiety, and will materially contribute to the patient's recovery. In all of my cases have I insisted on the *absolute necessity* of having a competent nurse, preferably a male, in charge of the after-treatment, and, where the family could not afford it, I have defrayed the expense, rather than run the risk of losing my patient through the over-zealous but faulty nursing of the parents and relatives.

The trachea having been opened, and the canula introduced, a mass of mucus, blood, and occasionally shreds of membrane, are expelled by a tumultuous aphonic cough, absence of which at this time is considered a bad prognostic sign, as indicating the abolition of sensibility in the tracheal mucous membrane. The introduction of a soft gum catheter through the canula into the trachea usually was successful in bringing about a spell of coughing, with expulsion of the tracheal contents.

The desiccation of the tracheal and bronchial secretions in the canula, and around its internal opening, the danger to which the patient is now constantly exposed, was sought to be prevented by those means which have again and again been described: a warm, moist atmosphere in the apartment; frequent brushing out of the canula with fine pigeons' feathers; a woollen comforter saturated with bichloride or carbolic acid solution around the neck; instillations into the canula of a few drops of a two per cent. boracic acid solution or of chlorine water solution (1 to 8) every few hours, according as the canular respiration appeared obstructed or not; and the steam

atomizer. In spite of all these precautions, and although when the inner canula was removed, cleansed, and returned to its place, the suffocative attacks returned with increasing severity, it was found that the inner extremity of the canula had induced such an irritation of the mucous membrane of the trachea as to cause an annular crust to be formed, which could only be dislodged after removing the entire canula and entering the windpipe with a soft catheter.

There is, of course, nothing new about all this, and it is adduced only for the purpose of showing how necessary it is to have a man about the patient who will dare to remove the canula at once, in case there should appear to be imminent danger of suffocation from so simple a matter as occlusion by dried mucus.

Many cases will be found on record in which death occurred under these circumstances before the physician could reach the patient.

The rule in our cases was to wait, if possible, with the removal of the canula, until the physician could be present, because its reintroduction is not always a simple affair.

The diet was semi-solid, consisting of custards, gruels, etc.; and when even these gained entrance into the larynx, nutritive enemata of Leube-Rosenthal meat solution, eggs, and brandy were given, in order to avoid all danger of "Verschluckung's pneumonie." When the patient could swallow easily, Tokay wine was given in comparatively large quantity.

In two of the cases which I saw with the late Dr. G. Mandelbaum, of this city, the prostration for a few days following the operation was so great that inhalations of pure oxygen gas were resorted to with apparent benefit.

In from three to six days after the operation, when the child showed signs of returning health, attempts were at once instituted to restore the functional activity of the larynx by closing for a brief time the outer opening of the canula with the finger, or by partially corking it, and gradually increasing the size of the cork until it completely closed the outer aperture. This was not easy in every case, on account of the granulations around and in the fenestra, and in the trachea surrounding the inner opening of the canula; in such a case small semicircular or crescent-shaped pieces of granulation tissue were spontaneously expelled, and the obstruction removed.

When, with the canula completely closed, the child was able to take a fairly deep inspiration, to speak audibly, and to blow out a lighted candle held at a distance of four inches from the mouth, we removed the canula and applied adhesive strips over the wound.

The shortest time after the operation that the canula was removed was six days; the longest, twenty-eight days.

Granulations in the trachea, forming polypoid growths, and softening of the tracheal rings from too long a retention of the same canula, are dangers not to be overlooked at this period, and the canula should either be changed or its removal attempted at the earliest possible time. To describe the symptoms and course of each one of my cases would unduly lengthen this article. Of the ten cases that I have tracheotomized, three terminated fatally. One died on the fourth day after the operation from heartf-ailure, while turning around in bed; the second from clogging of the trachea and bronchi with diphtheritic membrane on the fifth day; and the third from septic intoxication twenty-four hours after the operation. The remaining seven are still living. The youngest patient operated upon was two years and three months; the oldest, seven years old.

In conclusion I would say that, in my opinion, too much stress cannot be laid upon the importance of skilful and painstaking nursing in the after-treatment, and that when this will be more generally carried into effect we shall hear of a greater percentage of successes after this operation.

THE TREATMENT OF HYDROCELE AND VARICOSE VEINS BY CARBOLIC-ACID INJECTIONS, ETC.[1]

By LEONARD WEBER, M.D.,

[NEW YORK.

For many years I followed the routine of using Lugol's solution for the purpose of obliterating hydrocele. The procedure is often efficient, but always painful, followed by considerable local, and sometimes general, reaction. The folds of the testicle, and a good part of the scrotum, may slough away, if the fluid be forced between the membranes and not into the sac; but I have also seen some cases of moderate sloughing in consequence of the intensity of inflammatory reaction, although the operation was skilfully performed.

With injections of chloroform or alcohol for the above purpose I have had no experience; but as we became acquainted with the various uses of carbolic acid, it was natural enough that we should also test its power and convenience in setting up that degree of adhesive inflammation which would be sufficient to obliterate a serous sac or a varicose vein.

Case I.—In 1878 E. V——, aged twenty-six, came to me with a single hydrocele of probably traumatic origin that had been tapped a year before. The sac had refilled, and the patient was now ready to be operated upon. Having previously made up my mind that a solution of equal parts of carbolic acid and alcohol and water ought to be of sufficient strength to destroy the epithelial lining of the sac and obliterate the latter, I injected about three ounces of such a mixture, agitating the fluid for nearly three minutes before withdrawing it. The operation was done at my office, the patient experienced as good as no pain, and having replaced his suspensory bandage he rode home. Within the next forty-eight hours the hydrocele resumed nearly the size it had before the operation, but there was no pain, nor any other local or general disturbance. From about the fifth day on it began to grow smaller, and at the end of two weeeks had disappeared. It has not returned.

Case II. was that of I. B——, now seventy-two years of age. A large hydrocele developed in 1874; I tapped him five times up to 1879, the membranes of the sac remaining thin and soft. In March, 1879, I operated on him in the same way as above, and with the same satisfactory results.

Case III.—A. T——, aged forty-four, a liquor-dealer. I had relieved him of hydrocele of one side by injecting Lugol's solution some years ago. He came to me in April, 1881, with a hydrocele on the other side, and desired to have it tapped simply, as he was afraid to again undergo the pain and discomfort he had suffered after the first operation. He yielded to my persuasion as to the comparative painlessness and safety of the new method, and the result was in every respect as gratifying as in the other cases.

Case IV.—C. R——, aged forty-five, a mechanic. I cured him of a large and often-tapped hydrocele on his right side in 1868, by the radical operation. He has been troubled with hydrocele, of moderate size, on left side for a year or so. Evacuation of cystic fluid and injection of the above carbolic solution were made in May, 1883. In puncturing the sac a subcutaneous vein was cut by the trocar, causing considerable extravasation in the areolar tissue, swelling of the parts, and some pain and fever. Ice had to be applied for a few days to subdue inflammation, but no suppuration took place, and the final result was as good as in the other cases.

It stands to reason that carbolic acid, in common with all other means for injection, will not answer in hydrocele where the sac is hypertrophied to any considerable extent. The cyst in that case has the feel of a

[1] Read before the German Medico-Chirurgical Society.

stout rubber bag, is of oval shape when unilocular, and of more or less irregular shape when multilocular, by the formation of false bands in its cavity. Such cases need not always be old ones, as is shown by the history of the following: A young and otherwise healthy man came to me with hydrocele in 1880. It was of dumb-bell shape, of moderate size, tense, not transparent, and had developed after gonorrhœal orchitis fifteen months before. It had been tapped once. After making a free incision and evacuating about three ounces of yellowish and somewhat turbid fluid, the walls of the sac appeared to be one-third of an inch in thickness. A stout fibrous band drew the cyst walls together about the middle of the tumor. I broke down all the adhesions, scraped and washed the cavity thoroughly with sponges dipped in a ten per cent. solution of carbolic acid, and stuffed it with a pledget of lint smeared with unguentum iodoformi. The iodoform dressings were removed three times during the first ten days. Ungt. basilic. to stimulate granulations was substituted after that, and at the end of three weeks the cure was completed. The patient had some fever on the second and third days after the operation, but no more after that. In such and similar cases I have found the radical operation and antiseptic dressings the best and safest mode of treatment.

For the purpose of coagulating the blood in varicose veins and obliterating them by adhesive inflammation carbolic acid has proved to be a safe and efficient remedy in many cases. The first case in which I used subcutaneous injections of pure carbolic acid was that of L. S——, aged thirty-eight, a merchant, who came to me in 1878 with a markedly varicose condition of the entire territory of the saphena major of the right lower extremity. He was otherwise a strong and active man, but the pain and discomfort in walking caused by the increasing distention and pressure of the enlarged veins of the neighboring parts made it hard for him to attend to his business. Elastic stockings had given him no relief. I found four large sinuses beneath and to the inner side of the patella and at the popliteal space, which were exquisitely tender. I thought if I but succeeded in obliterating these the patient might be made comfortable otherwise by the judicious use of massage and elastic bandages. I tried Vidal's method by acute pressure. It failed to do what I wanted, but caused the patient some sleepless nights and much pain. I then injected four drops of carbolic acid into each sinus, entering the needle sideways and making compression at the proximal and distal end of the sinus until I felt that a soft coagulum had formed. Two sinuses were operated upon the first, and two on the next day, wet compresses and a bandage gently tied around the knee, and the patient kept in bed for a week. No unpleasant reaction took place. In the course of the second week the thrombi were flat and firm, and the sinuses became obliterated. With the help of a long elastic stocking Mr. S—— was soon able to be about all day long, without experiencing more than slight discomfort. I met him again in 1880, and learned that his leg gave him no trouble, but the stocking he had to have on when going about.

In treating hemorrhoids we must, of course, distinguish between external and internal ones. External hemorrhoids of small size may be obliterated by injecting a minim or two of pure carbolic acid, or, with less risk of sloughing, four or five minims of a fifty per cent solution of the acid.

A careful selection of cases of hemorrhoids suitable for the obliterating treatment by carbolic-acid injections is highly commendable. With small, tense, and moderately bulging tumors of this kind I have had barely good success; but the procedure was often painful, and not infrequently followed by inflammation. In a few cases gangrene of the injected hemorrhoid supervened, and the dead mass came away under antiseptic dressings without any unpleasant local or general consequences.

Phlegmon, abscess, and subsequent fistula in ano, in consequence of injections either too strong or applied in cases in which this mode of treatment was not advisable, have been seen, and I have personal knowledge of such a case which occurred not long ago in this city. The possibility of ascending thrombosis and pyæmia under similar circumstances cannot be denied. Altogether, the cure of hemorrhoids by carbolic-acid injections is a method which I believe to be neither as generally applicable nor so free from danger as it has been represented by some practitioners.

In operating it will be best to insert the needle about one-fourth of an inch from the base of the tumor, and push it through the sound skin directly forward into its central portion, taking good care not to spill any of the liquid along the track of the needle or at the point of entrance. This precaution I have found to be essential if we want to get obliteration of the pile by adhesive inflammation instead of seeing it slough away. The large and pendulous external hemorrhoids may be ligatured after incising their cutaneous parts, cut off, and the wound dressed with iodoform until the ligature comes away. Many such I have also clamped and cauterized with the Paquelin cautery to prevent hemorrhage and insure prompt and satisfactory healing of the wounds. In my experience this procedure has given invariably good and lasting results in all cases in which it was admissible.

Whether we employ the ligature or thermo-cautery in external or internal hemorrhoids, it is good practice to stretch the sphincter ani in a moderate degree before proceeding to operate. Such distention not only facilitates the operation, but also prevents subsequent pain and discomfort, and promotes the healing of the wound.

Carbolic-acid injections will not do for internal piles; they must be treated by the ligature, or the clamp and cautery, as described above.

I have the records of four severe cases of external and internal hemorrhoids, three in males and one in a female, every one of which had between five and eight hemorrhoidal tumors within and without the sphincters. They all showed the symptoms of anæmia to a considerable degree. Three of them were operated upon with the clamp and cautery, one with the ligature, and they all got well without secondary hemorrhage or other unpleasant symptoms.

25 West Forty-sixth Street.

An Improved Method of Operating for Cleft Palate.—A correspondent writes to *The Lancet*, November 7, 1885, concerning what he considers a great improvement in the operation for cleft palate. Hitherto great difficulty and not a little danger have arisen from hemorrhage during the operation, necessitating frequent and very skilful assistance, periodical discontinuation of the anæsthetic, and distinct intervals in the performance of the operation. In addition to these, other and minor troubles are experienced. All these difficulties may be avoided, and the operation rendered perfectly safe and easy, by the simple process of inversion as applied to the head only. This can easily be attained by bringing the patient's shoulders well up to the end of the operating table, and allowing the head to hang over the edge in the fully extended position. In this position the roof of the mouth would be horizontal or slightly inclined downward toward the operator, who should stand at the head of his patient. The anæsthetic is given through the nose by a small tube, and is quite out of the way of the surgeon. Only one assistant is required, who should stand to the left of the operator. In paring the edges no change of hands is required, but the corresponding hand should be used in elevating the tissues of the hard palate and in passing the sutures. Under these circumstances no blood can enter the larynx or œsophagus, the palate remains unobscured by blood, and whatever hemorrhage occurs finds its way into the nasal cavities, and at the conclusion of the operation may be emptied by simply turning the patient's head to one side.

Clinical Department

PROBABLY A DERMOID CYST.

THE following curious case is reported by Dr. F. L. Santway, of Theresa, N. Y.: A farmer, twenty-one years of age, weighing about two hundred pounds, while driving an empty hay-wagon one day in July, 1881, was thrown down, by a sudden start of the horses, to the bottom of the wagon. He fell on his back, his hips striking one of the bed-pieces of the rack, and, the horses becoming unmanageable, he was carried about a quarter of a mile in this position, with his back jolting against the piece of timber. From that time to the present he has suffered severely from pain over the region of the sacrum and coccyx. In July of this year he discovered a slight discharge from a small opening three and one-half inches above the anus, directly over the spine. Examination showed three small openings, the size of a pin-head, from which there was a thin, sanious, ichorous discharge. The openings were about three-quarters of an inch apart and were found to lead to a single cavity one and three-quarters of an inch below the surface. Thinking that there might be a detached spicula of bone, Dr. Santway incised the integument between the three apertures, when, to his surprise, instead of finding diseased bone, he discovered the cavity half filled with hair. There were about one hundred and fifty of these hairs, ranging in length from one-half to one inch. These were removed with the dressing-forceps, and the cavity was syringed out with carbolized water. The wound is now nearly healed, and the pain across the hips, from which the patient had suffered for four years, is rapidly diminishing. [It is not improbable that this patient had a congenital dermoid cyst, which is sometimes found in the sacral region, in which inflammation was excited by the injury.—ED.]

WHAT WAS IT?

DR. LEONARD WHITE, of Uxbridge, Mass., sends us a report under the above caption of two cases occurring recently in his practice. The first case was that of Robbie H——, eight years of age, who, when first seen, had been unconscious for eighteen hours and had passed no water for thirty-six hours. He had been complaining of headache and general malaise for two weeks. He had been vaccinated shortly before. The temperature was 104° F., pulse 120, rising to 136 in a short time, pupils contracted, breathing stertorous, abdomen somewhat tympanitic. Three pints of water were drawn from the bladder. The vaccinated arm was red and ulcerated, but there was no glandular swelling in the axilla. An enema of twenty grains of quinine in milk was ordered, and hypodermic injections of digitalis and brandy were given. This treatment, with carbonate of ammonia internally and cold applications to the head, was continued until the patient died, four days later. The abdomen became retracted, the pulse grew more rapid and feeble, and respiration was more and more labored and hurried. There was complete unconsciousness during all this time, and the prick of the hypodermic needle caused no wincing. A certificate of death from malignant typhoid fever was reluctantly given. The second case was that of Charles H——, twelve years old, who had been vaccinated two and one-half weeks previously. He felt well up to the day before being seen, when he complained of headache. At the time of Dr. White's visit the boy was unconscious, with a temperature of 104°, pulse 120, respiration very shallow and rapid. From the bladder was drawn a large quantity of urine heavily loaded with urates, but containing no albumen. The pupils were contracted, and the abdomen was only slightly tympanitic. Stimulants were given hypodermatically and by enema, and sinapisms applied to the neck and spine. Urine in large quantity was drawn every six hours. The patient did not rally, however, and died the following day. The consulting physician gave a certificate of death from septicæmia following vaccination, to which Dr. White would not agree, although he had not vaccinated either of the children. An autopsy could not be obtained. The writer would be glad to have an explanation from others who may have met with similar cases in their practice.

COCAINE IN DENTAL SURGERY.

DR. J. H. MARTINDALE, of Minneapolis, Minn., writes that he has had very satisfactory results with cocaine in his dental practice. Before proceeding to the extraction of incisors or bicuspids or their roots, he dries the adjacent portions of the gums and rubs them with a five per cent. oleate; then he introduces a hypodermic needle at the free edge, passing it for a distance of half an inch parallel to the roots of the tooth to be extracted, and injects two or three minims of a four per cent. aqueous solution. The tooth may then be pulled with little or no pain. In chronic alveolar abscess with fistula, the carious bone may be gouged away without exciting pain by introducing the hypodermic needle as far as possible into the sinus and injecting three or four minims of a four per cent. solution. The sensitiveness of the mucous membrane investing the parts near the soft palate, causing the patient to retch during manipulations about the back teeth, may be overcome by bathing the parts with the four per cent. solution. Dr. Carl Tuttle, of Berlin Heights, O., writes upon the same subject. He thinks that failure is often due to a too sparing use of the anæsthetic. He inserts the point of the hypodermic needle one-quarter of an inch from the free margin of the gum and passes it well down to the roots between the gum, and the alveolar process. He injects in this way seven minims of the four per cent. solution on each side of the tooth to be extracted, and allows eight minutes to elapse before using the instruments. He says that he has had very satisfactory results in dental practice from cocaine employed in this way.

CONCEPTION WHILE THE UTERUS CONTAINED A PLACENTA.

DR. W. M. TROW, of Northampton, Mass., gives an account of the following case: "Mrs. ——, a fleshy woman, and the mother of three children, regular in her periodicals except during pregnancy, passed her period in February, 1885. In March she was normally unwell, and was regular till August, which she passed. In September she again menstruated. In October she was taken with considerable flow and severe pain, which continued for twenty-four hours, when I was called to see her. On my arrival I found a three months' fœtus, which she expelled just before my entering the house. The placenta was partially detached, and occupied the mouth of the uterus. Under the influence of ergot it came away in a short time in a normal condition. The following day she was feeling well; the flow as usual in such cases. Four days after I was again called, and found that she had been flowing for twenty-four hours, and suffering severe pain most of that time. An examination revealed the mouth of the uterus open enough to admit two fingers, and occupied by a fleshy mass which was firmly attached to its fundus. I gave chloroform and introduced my hand into the vagina, when I was able to detach the mass, which was at once expelled. It proved to be a placenta as large as is usually found in a conception of four or five months. Pain and flowing at once ceased, and she made a fair recovery. This was a unique case with me in an experience of some thirty years."

Progress of Medical Science.

HYDRASTIS IN DYSPEPSIA.—In *The Lancet*, November 7, 1885, Mr. Auld directs attention to the value of hydrastis in small doses in certain forms of dyspepsia. Given in drop doses of the tincture (made with proof spirit) three or four times daily, between meals, is the mode of administration he would recommend. Larger doses often produce aggravation of the symptoms and diarrhœa. In his experience there are three kinds of dyspepsia to which it is applicable. The first is the dyspepsia of females, characterized mainly by pain and sinking at the epigastrium, nausea, and constipation, and associated with general debility, nervousness, wandering pains, and possibly leucorrhœa. The subjects of this variety are often intolerant of large doses of bismuth and other orthodox remedies; but, unless marked anæmia exists, they will speedily regain health and strength under the influence of hydrastis, which acts like a specific. The second form of dyspepsia which is often greatly relieved by this drug is that associated with certain constitutional diseases, particularly phthisis and malignant disease. Lastly, it is of signal benefit in the dyspepsia resulting from the abuse of drugs and alcoholic stimulants.

COCAINE IN THE TREATMENT OF HYDROCELE.—A correspondent of *The London Lancet* writes as follows concerning the above: "We all admit the great and frequently agonizing pain usually produced by the injection of tincture or solution of iodine, diluted or undiluted, in the radical cure of hydrocele of the tunica vaginalis; and many methods are employed to alleviate this pain, from simple compression of the cord to the production of general anæsthesia. To the flood of literature concerning the applications of cocaine and its salts I beg to add a note as to the use of the hydrochlorate in alleviating what is more than a discomfort in the treatment of the common affection under discussion. After withdrawal of the fluid from the hydrocele sac, it is easy to inject thereinto a drachm, more or less, of a five per cent. solution of the salt named, allow it to flow over the interior, and after five to ten minutes inject the selected iodine preparation, which will not give rise to any pain until an hour or more has elapsed, which pain, usually not severe, if necessary, can be controlled by the exhibition of a morphia suppository, or by some similar means. The use of the cocaine salt in this manner further allows kneading of the sac after the iodine injection, which kneading Davy and others have strongly insisted on; and while, on the one hand, paralysis of the sensory nerves of the serous membrane can, as Cohnheim showed, have practically no retarding influence on the development of the inflammation, on the other, no evil effects can follow the absorption of a quantity of cocaine so far below a toxic dose. Cases thus treated progress, with the exception of the pain, precisely as those in which no cocaine is employed."

THE ETIOLOGY OF DUPUYTREN'S CONTRACTION.—Dr. Lange reports the case of a woman who had for years had a contraction of the palmar fascia of both hands, so that the tip of the ring-finger of either side was drawn into the palm. This woman had an apoplectic seizure, and from the moment that paralysis of the left side appeared, the ring finger became fully extended and so remained, the corresponding digit on the right side still being firmly flexed. The deep folds of skin in the palm of the left hand became smoothed out, leaving scarcely any traces to show where the creases had been. The author regards this case as an evidence that Dupuytren's contraction has its origin in the central nervous system, a theory rendered more probable also by the fact that the affection is usually symmetrical. If the contraction in this instance had been due to disease of the muscles, fascia, or terminal nerve-filaments, it would hardly have been so suddenly relaxed upon the appearance of central paralysis. He thinks also that it points to nerve-stretching or resection as the proper mode of treatment. —*Allgemeine Medicinische Central Zeitung*, October 21, 1885.

COPPER IN THE TREATMENT OF SCROFULA.—From the results obtained in a large number of trials, Dr. Du Moulin is led to recommend the salts of copper in the treatment of various scrofulous manifestations. He asserts that they are efficacious in the cure of indurated and suppurating glands, in cutaneous affections, and in ophthalmia and keratitis due to scrofula. For a child from one to four years of age he orders a solution of from four and a half to six grains of sulphate of copper in three ounces of syrup, of which four teaspoonfuls are given daily.—*Rivista Clinica*, No. 9, 1885.

INHALATIONS OF DEFIBRINATED BLOOD.—Regarding on the one side, the possible dangers of transfusion, and on the other, the tolerance of liquids by, and their rapid absorption through, the respiratory mucous membrane, Dr. Fubini was led to test the value of inhalations of defibrinated blood (*Rivista Clinica*, No. 9, 1885). He caused healthy individuals to inhale, by means of an ordinary atomizer, about three ounces of a mixture of twenty parts of defibrinated blood in eighty parts of a strong solution of common salt. The inhalations were well borne by the larynx, and caused no change in the pulse, temperature, or respiration. In anæmic individuals, after repeated inhalations, the author noted a marked improvement in the general condition, and also a relative increase in the number of red blood-corpuscles.

BORATED VASELINE IN ERYSIPELAS.—Dr. Romit speaks very highly of boracic acid in vaseline, one part to twenty, as an application to the inflamed skin in traumatic erysipelas. It has an advantage over certain other applications in that it causes no discoloration, and does not mask the redness of the skin, so that the progress of the disease toward recovery can be readily observed. The redness and tumefaction rapidly disappear, the pain is quieted, and a cure is obtained within three or four days. The application is made over the affected part, and for some distance around over the healthy integument, and is repeated morning and evening.—*Rivista Clinica*, No. 9, 1885.

MALARIAL AMAUROSIS.—Dr. Rombro reports in the *Russkaya Meditsina*, No. 20, 1885, the case of a peasant, who became suddenly blind without any apparent cause. On admission to hospital two days later, no ocular lesions were discoverable, but the man was found to be suffering from malarial fever and to have hypertrophy of the spleen. He was given quinine daily, and at the end of a week the sight began to return, becoming normal a few days later. Dr. O. Petersen reports in the *Deutsche Medicinal-Zeitung*, No. 77, 1885, a precisely similar case which came under his observation during the Turko-Russian war, in which vision was restored in a few days by means of large doses of quinine.

VOMITING OF PREGNANCY TREATED BY ARTIFICAL FEEDING.—Dr. Brünniche reports in the *Hospitals-Tidende*, No. 29, 1885, the case of a pregnant woman who suffered from uncontrollable vomiting. After trying many things without success, the author obtained a cure by feeding his patient through a tube introduced into the œsophagus, but not into the stomach. Milk, broth, powdered beef, and other materials were introduced in this way and retained on the stomach, but as soon as the patient attempted to swallow the vomiting began again. At the end of three weeks, however, the vomiting was permanently controlled and the patient was able to take food in the ordinary way.

Syphilis, Ataxy, Cardiopathy.—The clinical and pathological labors of many authors attest the not infrequent association of heart disease with locomotor ataxy. Charcot and Vulpian some years ago pointed out the association; but Berger and Rosenbach, in 1879, gave more precise information on the subject. In seven cases of ataxy observed by them an insufficiency of the aortic valves was observed. MM. Grasset, Jaubert, Teissier, Weber, and others have written on the significance of this combination of diseases. A *résumé* of the subject is published in the *Lyon Médical*, in an article contributed by M. Bouveret. The chief question that occupies his attention is the relation of syphilis to locomotor ataxy and to cardiopathy. In some cases the cardiac disease can only be regarded as the result of rheumatism or atheroma, and its coexistence with locomotor ataxy must be looked upon as a coincidence. On the other hand, disturbances in the nervous system may originate derangement of the heart. Lastly, there is the possibility of the dependence of the aortic disease on syphilitic processes, which have also been operative in the causation of tabes dorsalis.

General Softening and Facial Ecchymosis.—Dr. Klippel describes an interesting combination of cerebral disease with facial extravasations of blood. The patient was a woman sixty-seven years of age, whose previous history was very imperfect, owing to her abnormal mental condition as well as to her lack of friends. Although there was no actual paralysis, and no rigidity of the legs, yet walking was impossible for her. All the limbs were wasted, and the fronts of the legs exhibited a pigmentary marking. The knee-jerks were absent, and there was incontinence both of urine and fæces. The arteries of the limbs were markedly atheromatous, and though the heart-sounds were altered from the normal there was nothing pointing to gross valvular lesion. While the patient was in this condition of dementia, and at the end of two months after her admission to the hospital, ecchymosis of the face supervened. It was certain that she had sustained neither a fall out of bed nor any sort of injury. The sanguineous extravasation began at the inner canthus of the left eye, and gradually spread thence. Some hours later a like condition came on in the inner canthus of the right eye. At the end of two days the whole of the upper half of the face became infiltrated with blood; very slowly this ecchymosis passed through the various stages of a fading bruise, and finally disappeared, with the exception of two symmetrical ecchymotic spots on the anterior part of each thigh. There were no other signs of purpura, either cutaneous or mucous. Signs of scurvy were wanting, and there was no fever. The reporter discusses the possibility of the ecchymosis being due to the influence of the nervous system, but inclines to the view that the causes were several, though chiefly vascular and nervous. Many cases are now on record of blood-extravasations occurring in the course of diseases of the nervous system, and this clinical experience, together with the facts of experimental pathology, seems to place beyond doubt the potency of the nervous system to rupture vessels.—*The Lancet*, October 31, 1885.

Scarlatinal Rheumatism.—The nature of the so-called scarlatinal rheumatism has long been a matter upon which there has been a considerable variance of opinion. On the one hand, it has been contended that the poison of scarlet fever, working in a subject prone to rheumatism, may be the exciting cause of an attack; in other words, that scarlatinal synovitis only occurs in the rheumatic. On the other hand, it is affirmed that this so-called rheumatism is only a manifestation of the scarlet-fever poison localized in the joints, or that it is in reality a form of mild septicæmia. Different writers have advocated various views; thus, Trousseau, Betz, and Huttenbrenner speak of this affection as indistinguishable from acute rheumatism, and most of the English text-books, including Bristowe, take the same view. There is, however, much to be said in favor of the opposite side, for it must be admitted that scarlatinal synovitis presents a picture which differs in many ways from acute rheumatism. One of the difficulties in settling the question arises from our want of knowledge of the pathology and etiology of the rheumatic state. The term is applied in an exceedingly comprehensive way, and covers an extensive ground. Thus, we have a "fibrous," a "muscular," a "gonorrhœal," a "gouty," as well as "scarlatinal rheumatism," all more or less differing in their chief symptoms, and perhaps also in their pathology, from acute or chronic rheumatism. In typical attacks of the scarlatinal variety, the joint pain is first complained of at the end of the first week, when the rash has nearly disappeared and desquamation commenced. The temperature, which has perhaps nearly reached normal, again rises when the joint-pain is complained of. The synovitis is especially apt to affect the finger-joints and wrists, then perhaps the knees and shoulders. It is not uncommon for the joints of the cervical vertebræ to be attacked, and also the synovial membranes lining the extensor and flexor tendons of the fingers, the palms or backs of the hands being swollen and tender. There is pain on movement, the joints are often red, swollen, less often distended with fluid. As a rule, the pain and tenderness quickly disappear in the affected joints, other joints becoming attacked, but the attack is fugitive, and in three or four days the attack is over and the patient free from pain, which rarely returns. As Trousseau has well reminded us in his lectures, "It is a singular eccentricity of scarlatinal rheumatism that it rarely assumes a formidable character; it is more localized, but less likely to return than ordinary rheumatism. When it has once left a joint it seldom comes back to it—generally it goes away quickly and spontaneously, without requiring any treatment." Another important point must be borne in mind, that while pericarditis occasionally occurs, endocarditis is very rare. It is, then, to this disease that Henoch, Jaccoud, Bokai, and many, especially German writers, refuse the name of rheumatism and prefer that of scarlatinal synovitis. There are unquestionably some facts which strongly support their objections. In the first place, this complication is far more common in some epidemics than in others, a fact which would point to the synovitis as being connected with the scarlatinal poison, rather than to the rheumatic diathesis of the patient. Then the attacks are fugitive and are rarely followed by a relapse, while in true rheumatism, as is well known, relapses are very common. Further, affections of the heart are rare, occurring very much less frequently than in acute rheumatism, at least when it affects children. Suppuration occasionally occurs in or about the joints, and purulent pericarditis is sometimes present in the fatal cases. In considering the question it is important to remember that synovitis occurs in other diseases, more especially those where some inflammation of a mucous membrane or a purulent discharge exists—such, for instance, as in puerperal fever, diphtheria, gonorrhœa, and also in ulcerative endocarditis. There is but little doubt, however, that true rheumatism does sometimes occur during convalescence from scarlet fever or diphtheria. These attacks supervene at various periods after the fever, are often severe, are accompanied by cardiac complications, effusion into the joints, acid sweats, and a tendency to relapse. Whether these attacks are simply coincidents, or the result of the accumulation in the system of waste products during scarlet fever, it is not easy to say. It seems very probable that some, at least, of those who have written on this question have been, in reality, observing different kinds of attacks, the one observing the synovitis, which complicates the fever the other, true rheumatism, supervening during convalescence. The whole series of joint-affections, complicating other diseases, deserve the most attentive study on the part of every practitioner, inasmuch as out of such study light might be thrown on the etiology of acute

rheumatism, which, in spite of many investigations and hypotheses, still forms a dark corner of clinical medicine. With regard to the suppurations which occur in or about the joints during the course of scarlatina, there can be little doubt that they form part of a general pyæmia, and on the post-mortem table abscesses may be found in the lungs and kidneys, due, doubtless, to septic embolia, derived from suppurating cervical glands or a sloughing throat. Some, however, of these cases which seem to suffer from a milder form of septicæmia recover after the evacuation of pus from the joints.—The *Provincial Medical Journal*, November 2, 1885.

The Treatment of Burns.—Dr. Meurisse speaks very highly of goldbeaters' skin as an application to burns. He says that it never becomes adherent to the skin as other forms of dressing do, the pain and inflammation are much less marked, and the wounds heal much more rapidly. The goldbeaters' skin may be washed with cold water at each dressing and can be used again and again. The liniment or other applications may be made directly to the skin and covered with the tissue. The same substance may be used in dressing blisters after the application of a vesicatory.—*Revue Médicale*, October 3, 1885.

Pathogeny of Pulmonary Emphysema.—Most diseases and degenerations have at one time or another been attributed to trophic changes, the result of disturbed innervation. Dr. Brown-Séquard believes that nervous disturbances in the pneumogastric play a part in the production of pulmonary emphysema (*The Lancet*, October 17, 1885). He does not deny the agency of mechanical forces, but he thinks they have been overrated. Neither forced inspiration nor energetic expiration during closure of the glottis has a preponderating influence in the genesis of emphysema. On the contrary, it is sufficient to excite the vagi as soon after death as possible in order to produce emphysema. The same result is obtained whether the post-mortem excitation be made at the medulla oblongata, at the cervical pneumogastric, or along its terminal branches. In opposition to Serres, it is asserted that stimulation and disease of the pons Varolii only exceptionally induce emphysema, though they are much more effective as causes of pulmonary apoplexy. The nearer the excited area of the pneumogastric is to the lung, the more marked is the emphysema. As of clinical bearing on the experimental question, Dr. Brown-Séquard refers to the development of emphysema with the first attack of genuine nervous asthma. It is impossible, he argues, that a few short hours of dyspnœa could develop so much emphysema. M. Laborde remarked, in the discussion on Brown-Séquard's paper, that among the decapitated emphysema was frequent. This circumstance is regarded as confirmatory of the opinions held by Brown-Séquard.

Fatal Cystitis Apparently Due to Phimosis.—Dr. Sadler, in *The Lancet*, October 17, 1885, reports the following case: A man aged seventy-seven was admitted to a hospital, suffering from partial retention of urine. His story was that he had had a very long prepuce all his life, but it had given him no inconvenience. Though for some years subject to frequent micturition by day and night, he had never been aware of any difficulty in expelling urine. He had been in failing health some months, and for several weeks his foreskin had been swollen and he had been unable to pass more than a few drops of urine at a time. He was a very feeble old man, and was very much collapsed on admission. On his hands and feet were numerous small, dry, brown fissures, as if from commencing dry gangrene. The prepuce was very long, œdematous, hard, and inflamed. It barely admitted a small probe. Bladder much distended. A fine curette was passed into the prepuce, and it was divided to its base. Then a No. 12 English silver catheter was passed without any obstruction into the bladder, and several pints of intensely fetid purulent urine withdrawn, with some decomposed clots. The bladder was washed out. The washing was repeated several times during the next twenty-four hours, but he never rallied from his collapse, and died quietly next day. No autopsy was permitted. There were no calculi in the perpuce, nor could any be felt with a sound in the bladder.

The Cause of the First Sound of the Heart.—An interesting note on the cause of the first cardiac sound, by Dr. Gerald Yeo, and Dr. J. W. Barrett, has appeared in the *Journal of Physiology*. Opinions, as is well known, have varied considerably on this point. Some observers, as Halford and Billing, looking at the relative size of the auriculo-ventricular and semilunar valves, have held that the sudden tension of the former is sufficient to produce the first sound of the heart. These observers point to the fact that just as the act of hooking back one semilunar valve abolishes the second sound, so the same act of hooking back one auricular valve, or the incompetence of the valve as a whole, impairs or abolishes the first sound; and they also point to the fact that the tracing of a cardiac contraction is a single contraction, and not a tetanus of the muscular tissue. Many careful experimenters, however, maintain that the muscular sound must be regarded as an element in its causation, and insist on the greatly increased volume of the sound in cases of cardiac hypertrophy. Drs. Yeo and Barrett's experiments originated in a difference of opinion between them on this point, each being desirous of persuading the other of the soundness of his views. To determine the question, a large cat and an active mongrel bull-terrier were chloroformed and subjected to artificial aspiration, and the cardiac sounds were then carefully listened for by each disputant, as well as by some independent observers, after the thorax had been opened by an extensive medial incision without injury to the pericardium. The veins were then compressed, and all noted that the sound became gradually slightly diminished, but did not become inaudible, the tone remaining distinct as long as the heart continued to beat. In the case of the dog, the same phenomenon was observed even after the heart was removed from the body, and the same was noted in the ventricle when removed below the valves. The authors therefore arrived at the conclusion that a definite aud characteristic tone, similar in quality to the first sound, is produced by the heart-muscle, under circumstances that render it impossible for any tension of the valves to contribute to its production.—*The Lancet*, October 31, 1885.

Obstruction of the Right Auricle by a Hydatid Cyst.—A curious case has been recorded by M. Ignatieff. He operated on a young peasant for hydatid of the liver. An incision six centimetres long was made in the linea alba. The peritoneum was divided and stitched to the integuments by points of suture. The operator was drawing the cyst forward to the abdominal wall before puncturing, when the heart of the patient suddenly ceased to beat; this was followed by stoppage of respiration, leading to asphyxia and death, despite tracheotomy and faradization about the diaphragm. At the autopsy an echinococcus, doubled up on itself, was found to obstruct the last part of the vena cava inferior; it projected into the right auricle. The bladder, when unrolled, measured ten centimetres across, and had a thickness of from three to four centimetres. Neither the auricle nor the ventricle contained any blood. The vena cava near the liver was perforated with a round opening about one centimetre in diameter; this aperture had obviously been caused by the erosion of the wall from the neighboring hydatid cyst. According to M. Ignatieff, the rupture was effected at the operation, and a hydatid vesicle, becoming engaged in the torn vessel, was carried upward, and so caused arrest of the heart.—*The Lancet*, October 17, 1885.

ADONIS VERNALIS.—Dr. Gaetano Traversa has made a most exhaustive study, both clinical and experimental, of the physiological and therapeutical action af adonis vernalis, the results of which he has published in detail in the *Giornale Internazionale delle Scienze Mediche*, Nos. 8, 9, and 10, 1885. He says that he has been led by these trials to regard the drug as one of the greatest value, and he does not hesitate to call it the best cardiac tonic which we possess, and one which may render the greatest service in the treatment of chronic heart disease. He thinks it more certain in its action than digitalis, and preferable to the latter drug also from the fact that it is rapidly eliminated from the system and never exhibits a cumulative action, and, furthermore, does not disturb the cardiac function when given in large doses. Adonis unites to rapidity of action and certainty of effect the most excellent and desirable quality of innocuousness. It possesses, also, marked diuretic properties.

ACUTE NEPHRITIS COMPLICATING PULMONARY TUBERCULOSIS.—Dr. E. Marchiafava describes a case of acute nephritis, occurring in a young man affected with phthisis, with a cavity in the lung, which appeared two weeks before death without any apparent cause. The kidneys were found to be increased in volume, softened, with subcapsular hemorrhages and dilated glomeruli. Microscopical examination showed similar lesions to those present in the graver forms of post-scarlatinal nephritis. Numerous sections of the kidneys were made in the search for micro-organisms, but although various kinds of staining were employed, neither tubercle bacilli nor other forms of microbes were found. This case would add weight to the belief that grave forms of acute nephritis may occur in the course of pulmonary tuberculosis which are not due to the presence of the tubercle bacillus or of any other species of micro-organisms. It is simply a toxic nephritis, caused by certain products elaborated in the pulmonary cavity and carried by the circulation to the kidneys, setting up there inflammatory action.—*Gazetta Medica di Roma*, October 15, 1885.

FRAGILITAS OSSIUM IN SYPHILIS.—Many writers have referred to brittleness of the bones as of peculiar frequency in syphilis, but the cause of this change in their structure has not been satisfactorily explained. With a view of elucidating the subject M. Charpy has recently made a careful examination of the bones of several cadavers which presented evidences of syphilitic disease. He found that he was able, with a very slight degree of force, to snap the fibulæ, although to outward appearances their structure was unchanged. The bones were of normal thickness, and microscopical examination gave no evidence of change. Chemical analysis showed the normal relation between the organic and inorganic constituents, but of the latter there was a diminished percentage of fluoride of calcium (1.99 instead of 2.43 per cent.). Dr. Charpy regarded it, therefore, as possible that the abnormal fragility might depend upon a deficiency in the bones of fluoride of calcium.—*Deutsche Medicinal Zeitung*, November 2, 1885.

THE TREATMENT OF CHOLERA INFANTUM.—In an interesting paper upon "The Disproportion between the Calibre and Contents of the Vessels in its Relation to Etiology and Therapeutics," read at the Fourth Congress of German Physicians, Dr. E. Meinert, of Dresden, endeavors to show that the great danger to life in cholera infantum and other similar affections is in paralysis of the heart. A reduction in the contents of the blood-vessels, and a consequent disturbance of relation between the calibre of the vessels and the amount of blood contained in them is brought about, he says, not only by hæmorrhage but also by a rapid and extreme loss of watery fluids, such as occurs in several diseases. To these affections belong sunstroke, Asiatic cholera, cholera nostras, and cholera infantum, all of which are accompanied by a more or less rapid excretion of fluids. Death in these diseases, Dr. Meinert states, is due to cardiac paralysis induced by incomplete filling of the vascular system. His treatment, therefore, consists in the exhibition of as much water as the patient is able to swallow. He opposes strenuously the teachings of those who advocate withholding all food and drink for a period of six to ten hours, and says he can regard the recovery of a child with cholera infantum so treated as nothing short of a miracle. But fortunately the mothers of these little patients seldom have the heart to refuse their plaintive prayers for drink, and it is because they disobey the physician's orders, he thinks, that the children do sometimes recover. He gives clear water, tea, or very diluted milk, in repeated doses, and if the child throw it up he gives him some more to swallow, maintaining that in this way the tissues get a little water, and the stomach seems to acquire a tolerance. In a very short time, he affirms, this mode of treatment brings about recovery. The vessels become filled again, the vomiting and diarrhœa cease, and the life of the infant is saved.

KAVA IN GONORRHŒA.—This drug is recommended by Dupony and Gubler as almost a specific in the treatment of gonorrhœa and leucorrhœa. The active principles of the plant are a resin and a crystalline substance called by Gubler kavaïne. The administration of kava in gonorrhœa increases the urinary secretion, reduces inflammation, and quiets pain. It has the advantage over balsam of copaiba in that it has a pleasant taste, and does not affect the stomach unpleasantly. The plant, as is known, is a native of the islands of the Pacific.—*Deutsche Medicinal Zeitung*, November 2, 1885.

ALBUMINURIA IN ACUTE ARTICULAR RHEUMATISM.—In a recent thesis Dr. Chéron details the results of certain investigations which he has been making concerning the condition of the kidneys in acute articular rheumatism. He found albumin in the urine in about forty per cent. of the cases examined. Its presence is due, he thinks, to a passing renal congestion, an ordinary mild form of nephritis, or, occasionally, to renal embolism. The existence of albuminuria, he says, offers no contra-indication to the continued exhibition of sodium salicylate.—*Archives Générales de Médecine*, November, 1885.

OVARIAN HERNIA.—Professor Andrea Ceccherelli relates the case of a woman, thirty-eight years of age, who entered the hospital on account of a swelling which had appeared the evening before in the right inguinal region at the same time that the menses appeared. Examination showed a small tumor, a little larger than a walnut, movable, and but slightly painful on pressure. Herniotomy being performed, the body was found to be an ovary. The organ was returned with some difficulty, but the patient made a good recovery, and was discharged at the expiration of a fortnight. Boinet has collected the statistics of nine cases of this sort in which ablation of the ovary was practised, with the result of a cure in eight of them. But Dr. Ceccherelli advises oöphorectomy only in those cases of ovarian hernia in which there are plain indications of disease in the organ at the time of the operation. And such evidence of pathological changes is present, he says, only in exceptional cases, so that, as a rule, an endeavor should be made to return the ovary intact into the abdominal cavity.—*L'Union Médicale*, October 20, 1885.

THE DANGER OF SUBMUCOUS INJECTIONS OF CHLOROFORM.—Dop and Guillot have advised the injection of five or six drops of chloroform beneath the mucous membrane of the gums for the relief of toothache. But Blocq asserts that this procedure is not free from danger, and relates a case in which it was followed by extensive and painful swelling of the face, with necrosis of the mucous membrane of the upper lip and gum, resulting in prolonged suppuration and superficial necrosis of the jaw.—*Centralblatt für Chirurgie*, October 31, 1885.

THE FOVEOLA COCCYGEA.—This is the name given by Eckert to a depression in the skin sometimes found in the region of the coccyx. In an article in the *Centralblatt für Chirurgie* for October 31, 1885, Dr. O. Madelung says that his attention was first called to the existence of such a depression in the case of a boy with a pelvic abscess, in whom the foveola at first suggested the cicatrix of an old sinus. He learned, however, that there had never been any suppuration from this part, and further investigations showed that such depressions were by no means of great rarity. This depression indicates the position of the *glabella coccygea*, a small spot on the skin, near the junction of the last sacral and first coccygeal vertebræ, which becomes visible about the middle of fœtal life. The spot is uncovered with hair, and the skin is thinner than that of the neighboring parts. It is difficult to distinguish the glabella in the infant, but in the new-born it is often very distinct, as it is hairless, while the surrounding parts may be thickly covered with lanugo. This part is not infrequently also found as a crescentic or funnel-shaped dimple, and in such cases the depression or foveola remains after the glabella is no longer distinguishable. A knowledge of the possible existence of this anomaly may be of practical value. The author mentions the case of a man who had noticed pus-stains on his linen, and whose physician, on examination, discovered what seemed to be a sinus in the region of the coccyx. A probe failed to detect dead bone, but nevertheless this was supposed to be the cause of the discharge, and an operation was proposed. Madelung found, however, that the supposed fistula was merely a deep foveola, and the formation of pus was occasioned by an eczematous inflammation of the skin. Appropriate treatment was followed by a cure of the eczema. In a case of breech presentation the accoucheur felt a foveola and supposed it was the anus, while the anus he mistook for the vulva, and accordingly prophesied the birth of a female infant. He was somewhat chagrined to find a boy.

QUADRUPLE PREGNANCY.—Dr. Castañeda y Campos reports in the *Gazette de Gynécologie* for November, 1885, the case of a woman, twenty-eight years of age, who was delivered at the sixth month of four children. Three were males and one female; one was still-born, while the others lived from one to thirteen hours after birth. There were three distinct placentas, one being common to two fœtuses, and these were the most feeble and shortest-lived of the four, although they were the largest. The children died in the order in which they were born, the first being still-born, while the fourth lived for thirteen hours. It would thus seem as though the few extra minutes of intra-uterine life had given the later ones a greater degree of vitality, enabling them to survive by several hours the first-comers. The mother suffered from phlegmasia alba dolens, but recovered promptly under appropriate treatment.

THE KIDNEY IN DIABETES.—In a recent work upon "The Kidney in its Relations to Diabetes," Dr. Inglessis states that functional hypertrophy of this organ is the most common lesion found associated with glycosuria. The kidney is increased in volume, and the cells of the convoluted tubules are markedly hypertrophied. True inflammation supervenes only after the disease has existed for a considerable period, and when present it usually assumes the form of parenchymatous nephritis. *Le Progrès Médical*, October 3, 1885.

COCAINE IN SEA-SICKNESS.—Dr. W. Otto, surgeon of the steamship Ems, of the New York and Bremen Line, publishes in the *Berliner Klinische Wochenschrift*, of October 20, 1885, the results of his experience with cocaine hydrochlorate in the treatment of sea-sickness for the five months, from May to September, inclusive. The drug was given by the mouth in aqueous solution in doses of $\frac{1}{4}$ to $\frac{1}{3}$ grain, not oftener than three times a day. It was given only to adults and never hypodermatically. By means of this the vomiting was controlled, and nausea quieted; usually, also, a quiet and refreshing sleep followed, so that some of the patients supposed that they had taken morphine. In some cases, however, the drug failed to give relief, and the patients remained sea-sick until the end of the voyage.

THE NUMBER OF BACILLI IN THE SPUTA OF PHTHISICAL PATIENTS.—Dr. Zenkevich, of Kieff, formulates the following conclusions from the study of a large number of observations: 1. The quantity and quality of the expectorated matters have no influence upon the number of bacilli therein contained. 2. The assertions of Balmer and Fraentzel and of Pfeiffer that the bacilli are most numerous during the last days of the patient's life are far from being correct. 3. The quantity of bacilli in the sputa is not proportional to the extent of pulmonary tissue involved. 4. It bears a direct relation to the degree of fever, and this depends upon the destructive rapidity of the disease. 5. The bacilli do not grow primarily in the purulent secretion and penetrate thence into the lung tissue, but the opposite is the case. The assertion which has been made that they develop better in the sputum than in the pulmonary parenchyma is, to say the least, very doubtful.—*Journal de Médicine de Paris*, November 1, 1885.

THE ACTION OF NITROGLYCERINE IN NEPHRITIS.—Dr. Burginski formulates the following conclusions from a series of investigations which he has made concerning the treatment especially of parenchymatous nephritis (*Brach*, No. 21, 1885). 1. Nitroglycerine in small doses reduces the amount of albumin in the urine. 2. It increases the total quantity of urine excreted, and this effect is observed for some time after the administration of the drug has been discontinued. 3. The amount of albumin is still further reduced when the drug is given in gradually increasing doses. 4. Nitroglycerine appears to have no influence upon the specific gravity of the urine, nor upon the weight of the individual. 5. The only unpleasant effect of the drug, when given in Bright's disease, is a slight and transitory headache, observed sometimes at the commencement of treatment.

CHICKEN-POX AND SMALL-POX.—M. d'Heilly, of Paris, during an epidemic in his wards of chicken-pox, made several inoculations, which succeeded three times in ten. Trousseau attempted, but was always unsuccessful; Steiner succeeded in eighty per cent. After successful inoculations, chicken-pox is not preceded by prodromata. The period of incubation is from three to seventeen days, an average of from fourteen to seventeen. Chicken-pox always resulted, and never small-pox. One of the children had been previously attacked by small-pox; the subsequent attack of chicken-pox ran its usual course. In children previously vaccinated and then inoculated with small-pox, the vaccination-pustule dried on the eighth day; chicken-pox appeared on the twelfth, and followed its ordinary evolutions. In one case, a small-pox eruption appeared two days after the chicken-pox eruption, and went on through all the stages. M. d'Heilly considers that these facts demonstrate that chicken-pox and small-pox are two distinct diseases. The period of incubation can be co-existent or follow closely one after the other. Chicken-pox vaccination did not leave any marks, and the eruption was not near the area of vaccination. M. d'Heilly vaccinated from chicken-pox vesicles on the second day. M. Dumontpallier observed that M. d'Heilly's experiments were not conclusive, because the children vaccinated for small-pox remained in the ward among the children suffering from this disease. The experiments of the same kind he had made with Trousseau all failed, the children were removed from contact with chicken-pox patients.—*Brit. Med. Journal.*

NOT A "COMPLICATION OF DISEASES."—Medical Examiner: What did your father die of? Applicant: Oh, just *plain* death.

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THE FINAL REPORT ON THE CHOLERA BACILLUS.

THE full text of the report made by Drs. E. Klein and Heneage Gibbs, on the subject of the relations of the comma-bacillus of Koch to cholera, has been published. With it is a report of a Committee appointed by the Secretary of State for India to pass upon the report of the Cholera Commission. This Committee was composed of Dr. Burdon-Sanderson, Sir J. Fayrer, Sir William Gull, Sir W. Guy Hunter, Sir W. Jenner, Dr. Timothy Lewis, and several others.

The full report of the Commission contains in effect no new facts, but only a more elaborate discussion of results of the investigations of Klein and Gibbs. These gentlemen reiterate their statements: 1. That the comma-bacilli, though occurring ordinarily in cholera, do also occur in other diseases. 2. That these bacilli do not always occur (as claimed by Koch) in vast numbers in the intestine, and that they are not always found in the intestinal tissue, but only in the mucous flakes. 3. That the comma-bacilli, when cultivated and injected into the system of lower animals, do not produce genuine Asiatic cholera; and, finally, that the comma-bacilli were not always found in water-tanks in the vicinity of places infected with cholera, while they were found in some tanks in neighborhoods not infected.

The conclusions of the Committee are summed up as follows:

"1. Comma-shaped organisms are ordinarily present in the dejections of persons suffering from cholera, but not in the blood, the intestinal mucous membrane, or any other tissue. 2. Comma-shaped organisms of closely allied morphological appearances are ordinarily present in different parts of the alimentary canal in health, and are developed to an unusual extent in certain diseases in which there is copious intestinal secretion; the predominant form in any given case depending in a great measure on the nature of such secretion. 3. The comma-shaped bacilli ordinarily found in cholera do not induce that disease in the lower animals, and there are no real grounds for assuming that they do so in man. 4. The committee expressed its 'conviction that sanitary measures in their true sense, and sanitary measures alone, are the only trustworthy means to prevent outbreaks of the disease, and to restrain its spread and mitigate its severity when it is prevalent.'"

The conclusion of the whole matter is that the causal relation of Koch's comma-bacillus to Asiatic cholera is "not proven."

Of the scientific value of the English Commission's report we have already expressed an opinion. While exhibiting much technical skill and labor it was not a thorough piece of work, and showed both a bias against Koch, and a lack of appreciation of some of the most essential points made by Koch. Though the report has been "tinkered" considerably since its substance was first communicated there is no reason to change the above expressed opinion of it.

As for the conclusions of the Committee they are utterly inane and valueless. A number of the members were gentlemen already committed irrevocably to special views of cholera, while others were gentlemen distinguished mainly as general consultants, and having not the slightest expert knowledge of bacteriology.

Since Klein and Gibbs made their investigations several most careful experimenters have corroborated Koch by studies much more exhaustive and exact. While the comma-bacillus may yet be regarded as of doubtful specific character, its claims for such character are much stronger than would be supposed from the conclusions of the English Commission and the English Committee.

THE PRACTICAL WORKING OF LAWS REGULATING MEDICAL PRACTICE IN THE UNITED STATES.

UNDER the above title Dr. Richard J. Dunglison makes a report to the American Academy of Medicine of the results of an inquiry into the working of the various medical laws in the United States.

The report is valuable as giving the opinions of prominent physicians who reside in the different States, and who have some direct and personal knowledge of the question at issue. It has to be confessed that a perusal of Dr. Dunglison's paper does not leave one in a particularly encouraged state of mind. It is true that nearly all the correspondents write hopefully, and nearly all believe that in time some medical legislation will be accomplished which will benefit both the public and the profession. The main complaint everywhere is, that it is difficult to obtain a law, and still more difficult to execute it, because the people or their legislators believe that it is "class legislation," and intended for the benefit of the doctor.

A few of Dr. Dunglison's correspondents express the view that all attempts at regulating medical education and practice by law are unwise and not in harmony with the spirit of our institutions. The matter has been often argued, and we do not propose to revive it again now. We believe that the opinion of most of those who have thought seriously upon the matter is in favor of some form of State regulation of medical practice. Unlike the clergyman, or lawyer, the doctor is, in his professional capacity, an officer of the State. He renders his services to it in his reports of deaths, births, and contagious diseases, and as a medical witness in courts. The State has a right, therefore, to see that its officers are competent. Beyond all this, the physician who is uneducated and incompetent is a source of danger to the public health, and here again the State has a right to protect itself.

With the greater maturity of our country we believe that public sentiment will sustain efficient laws to these ends. Nor does it seem possible that it can take a very long time for the public to learn and admit that a community supplied with well-trained medical men will be in a safer and healthier condition than if supplied simply on the supply and demand principle.

THE BLOT UPON THE BRAIN.[1]

PSYCHOLOGICAL studies are among the most fascinating in literature. There is implanted within the human breast a liking for oddities, and when these concern that most mysterious of human organs, the brain, there comes to each individual who reads a sort of personal appeal unlike anything else in *belles-lettres* or scientific writing. The possibility of your gray cells or your neighbor's gray cells escaping their task-master, and performing freaks which, since they occur in others, is manifestly inherent within them, adds a curiosity half pleasurable, half painful, a piquant mingling which one would not forego.

Dr. Ireland has brought together a baker's dozen of such papers, under the sensational title of "The Blot upon the Brain." In his book he makes a bid for a wider circle of readers than those interested in medical psychology alone. To prepare these, he presents in his opening paper, on "Hallucinations especially of Sight and Hearing," a cursory glance at the nervous system; at the same time he desires to place all his readers in a proper frame of mind to receive his historical sketches, which follow. These form the most interesting and entertaining portions of his book. Exceedingly well written and carefully worked up, they focus an intellectual light upon the individuals who for many centuries have been, because of their strange and unaccountable acts, colossal statues in history, which have dwarfed all others and have made their names adjectives, by which is condensed in one word their distinguishing peculiarities. Among such are Joan of Arc, Mohammed, Nero, and others of royal blood.

The author justly remarks: "In psychology speculation has long done its best, and it is to observation that we must look for more light; but let us not run away with the notion that we understand the nature of hallucinations when we have indicated their anatomical seat. There is a mystery about the relations of sensation and perception of nerve tissues which cannot be explained."

With this idea paramount, the writer turns his attention to the historical personages just spoken of. The hallucinations of Mohammed, Luther, and Swedenborg are considered, which are familiar to readers of history; but the interest in these papers and those following resides in the fact that the author has brought them together and shown their relation to concurrent events. For delicacy of handling, and nicety of portrayal, the paper on "The Character and Hallucinations of Joan of Arc" takes the precedence. The portraiture of the inspired peasant girl, drawn in its psychological aspect, is so finely done that it is like some picture painted by an artist who has had a fresh inspiration with reference to an oft-considered subject, which far removes his creation from the every-day hackneyed conception.

The third historical study is entitled "The Insanity of Power." With this may be included "The History of the Hereditary Neurosis of the Royal Family of Spain." In all of these is shown the descent, from one generation to another, of the functional nervous disturbance which appeared as epilepsy in some, as flagrant insanity in others, giving to the world such monsters of iniquity as Nero and Caligula, of Rome; Mohammed Toghlak, the Sultan of India, whose cruelties are too horrible to be mentioned; the atrocities of Ivan the Terrible and his descendants. About the throne of Spain, for three hundred and fifty years, lurked an hereditary neurosis, which, to quote our author, "passing over a generation, and appearing in various forms and intensities as epilepsy, hypochondria, melancholia, mania, and imbecility, at length extinguished the direct royal line of Spain. The baneful tendency in the blood was re-enforced by close intermarriages with families of the same stock." In concluding his paper, the writer answers the question, "Who is well born?" and, in answering, points the moral of his tale:

"Whoever attends closely to history must know that there is a great deal in birth, but not birth as fixed by laws and traced by heralds. A man who is well made, strong, mentally gifted, and able to do much work and stand much strain must be well born; and a race sodden with epilepsy, insanity, and scrofula, whatever its fictitious rank, is necessarily low born, and in reality not worth preserving. The royal families of Europe have shown a tendency to segregate themselves, as if the possession of political power conferred some peculiar virtues on the stock, and this leads them to seek alliances which sound notions would teach them to avoid, and to brand as morganatic, or left-handed, marriages which would purify the blood. If the people they rule over had any voice in such matters, as they have so deep an interest, they would forbid two royal families, each tainted with insanity, from intermarrying with one another, as fraught with great dangers, not only to the family, but to the nation placed under its rule, and which must suffer for the extravagance of its members."

The concluding papers, "Fixed Ideas," "*Folie à Deux*," "Unconscious Cerebration," "Relation of Words to Thought," "Left-Handedness," "Mirror Writing," and "The Dual Functions of the Brain," are often very suggestive and interesting; at other times there is superficiality in the treatment and a lack of breadth in striking contrast to what one is led to expect from the consideration of some of the other subjects.

Space does not now permit us to enter into a detailed exposition of these statements, nor can we dwell longer on much that is worthy of the attention.

A marked detraction from the scientific aspect of the book are the sensational headings of the pages, drawn from some incident related. To illustrate, one page is entitled "Is She Pretty, or Not?" another, "Suspicious of Shrewd People;" still another, "Our Idea of a Solid Body," etc. When he considers some of the deep problems of psycho-philosophy his style is somewhat rambling and ambiguous, and the reader trying to follow the argument is further distracted by these captions which head the page, which, if not as sensational as those quoted,

[1] The Blot upon the Brain: Studies in History and Psychology. By William W. Ireland, M.D., Edinburgh. Published by G. P. Putnam's Sons. New York: 1886.

are often wide of the mark. These defects, however, are pardonable, since in the main the book is readable, entertaining, and instructive far beyond the average.

ALLEGED HYDROPHOBIA AND ITS ALLEGED METHOD OF PREVENTION.

The history of hydrophobia in Newark, N. J., during the past two weeks, is full of dramatic and scientific interest. An alleged mad dog ran through the streets of the city and bit a large number of other dogs, as well as six previously healthy children. The quantitative development of the hydrophobic virus (and this furnishes the first point of interest) was certainly very large, for, besides six children and six dogs known to have been bitten, a number of other dogs were believed to have suffered, and were in consequence promptly shot by the intelligent police. The spinal cord of the original alleged mad dog has been preserved for experiment, the six bitten dogs have been corralled by the Board of Health for the purpose of observation, and four of the bitten children have been sent to Paris for purposes of "Pasteurization."

At date of writing it is still uncertain whether the dog was mad, and it is rather more than certain that Pasteur's preventive inoculations are of no value whatever, except to relieve mental distress. Therefore, we are as yet unable to say whether the hydrophobia fright in Newark is to turn out a comedy or a tragedy.

It is gratifying, however, to see the ready sympathy so practically displayed toward the bitten children, and the prompt appreciation by our community of the possibilities of a novel preventive measure.

WISHING TO BE LET ALONE.

By an extraordinary process of reasoning, the *Journal of the American Medical Association* attempts to show that there is now no longer any reason for criticism, protest, or discussion regarding the management of the International Medical Congress. Having turned a masterly somersault in defending as parliamentary a procedure that it at one time was at extraordinary pains to condemn, it now believes that every one should cease complaining, and let its affronts and inconsistencies alone. We are strikingly reminded of a once popular poem concerning an "old cove" who sat at an advantageous spot and shied stones at the passers-by. He, too, only wished "to be let alone."

It is, however, not reasonable to expect that a policy which excludes so many leading men from all honorable connection with the Congress, shall not continue to be criticised.

OCCUPATION AND MORTALITY.

In an introduction to the supplement to the Forty-fifth Annual Report of the Registrar-General, Dr. William Ogle has given some instructive facts regarding the mortality-rate of different occupations. His figures are based on the British census for 1881 and the recorded deaths in the Registrar-General's office for the years 1880, 1881, and 1882. They cover only deaths occurring in males above the age of fifteen (of whom there are 8,000,000 in England and Wales) and indicate the comparative mortality-rate in seventy-three different industries.

Dr. Ogle shows, first of all, that the mortality-rate for persons between the ages of twenty-five and forty-five has decreased, while that for persons between forty-five and sixty-five has increased.

In order to indicate the comparative mortality of different occupations, he takes as an average mortality figure for all males in England, 1,000. He then finds that to every 1,000 deaths among male adults of all classes, there are only 556 among clergymen and priests. Next to this class, in healthfulness, come the gardener and nurseryman with 599 deaths, the farmer and grazier with 631, and the farm laborer with 701

The figures for the other occupations, or groups of occupations, increase rapidly, and at the bottom of the list appear the following: Plumber, painter, and glazier, 1,202; cutler and scissors-maker, 1,309; musician and music-master, 1,314; hairdresser, 1,327; cab and omnibus service, 1,482; chimney-sweep, 1,519; innkeeper and publican, and wine and spirit dealer, 1,521; messenger, porter, and watchman, 1,565; file-maker, 1,667; earthenware manufacturer, 1,742; Cornish miner, 1,839; costermonger, hawker, and street-seller, 1,879; general laborer in London, 2,020; and inn and hotel servants, 2,205. Compared with the clerical, the legal and medical professions appear in a far less favorable light: the mortality figures for barristers and solicitors is 842, and for physicians, surgeons, and general practitioners, so high as 1,122, against 556 only in the clerical profession.

It thus appears that in England two doctors die for every clergyman.

Some light is thrown upon the causes of the excessive death-rate in some occupations. Thus among inn-keepers and saloon-keepers, who have the high comparative figure, 1,521, the deaths from alcoholism and liver-disease are five times greater than the average among males. Among file-makers, plumbers, and painters there is an excessive death-rate from diseases of the urinary system. The mortality-rate for phthisis is very low among farmers, fishermen, and gardeners, while it is very high among file-makers, printers, earthenware manufacturers, and is highest of all among Cornish miners. On the other hand, it is very low among coal-miners.

Dr. Ogle's statistics are interesting, but they are vitiated in a measure, as he himself, we believe, admits, by the fact that it is not alone occupation, but the home and domestic environment that have to do with mortality. In this country, also, the element of climate would have to be considered.

THE HEALTHFULNESS OF HEATED STREET-CARS.

Considerable discussion has been going on as to whether it is better, from a hygienic point of view, to have street-cars heated. It requires but little observation to see that, as some cars are heated, it is undoubtedly unhealthful and unsafe. Ill-tended fires in hot and dirty stoves simply develop smells, intensify contagion, and render travelling unsafe by reason of the sudden changes from pure cool air to that which is hot and foul. It is, we believe, conceded that the conductors on these cars

suffer more frequently from colds and bronchial disorders than those on the unheated cars.

It is perfectly safe, however, and much more comfortable to have cars moderately heated, provided they are also kept clean, and, provided also, that some attention is paid to ventilation, so that the car is not an almost air-tight box, except when the doors are opened.

SNEAK-THIEVES AND DOCTORS' OFFICES.

IT is quite time that our police authorities showed some capacity for dealing with sneak-thieves. In this city the class in question have been making constant depredations upon doctors especially, until matters have reached such a pitch that it is more than simply a question of overcoats and mantel-clocks that is involved. We are hardly aware of a single physician in this city who has not had some disagreeable experience with sneak-thieves, and the result now is that many medical men refuse to go to any new address when summoned professionally by strangers. Over and over again we hear the story of a man calling and saying that medical help is needed at a certain address. If the doctor is out, "he thinks he will wait;" and if the servant is unwary, he absconds with whatever he can lay his hands upon.

The results of all this, as we have said, are now reaching beyond those of petty loss of personal property. It is sometimes difficult for a sick man to get a reputable physician in an emergency. His own medical attendant may be away, and another is hurriedly summoned; but, warned by experience, the doctor refuses to go without some assurance of good faith.

We can readily understand that serious harm may happen through this state of affairs.

When physicians call upon the police for protection, some stupid political detective saunters around and listens politely to the story. He thinks it over, and that ends it. Can we not have something more done than this?

THE PRESENT ASPECT OF THE TREATMENT OF TYPHOID FEVER.

IN *Schmidt's Jahrbücher* for October last Dr. Arthur Geissler reviews the contributions to the literature of typhoid fever made in the past three years. In the direction of therapeutics these contributions have been quite numerous. A study of them shows in a striking manner the two main tendencies in which efforts to find helps in the treatment of typhoid have been directed, viz., toward antipyretics and antizymotics. On the one hand is a numerous school which advocates the use of cold baths, or of quinine, salicin, antipyrin, and its allies; on the other, an almost equally large constituency which commends carbolic acid, or carbolic acid and iodine, calomel, naphthaline, and similar drugs. It is difficult to say as yet which has the preponderance of support.

It is certain, however, that the cold-water treatment has received a decided set-back both in Germany and in France. The discussions which took place in 1883–84 at the Académie de Médécine on typhoid fever, elicited opinions which, on the whole, were decidedly unfavorable to the systematic use of hydrotherapy. A recent discussion at the Berlin Medical Society, in which Senator introduced the subject of the treatment of typhoid fever, brought out also a large amount of evidence against the systematic use of this measure. Very significant are the statistics of Dr. Gläsel who, in two divisions of the Hamburg hospital, treated one set of patients with antipyresis, the other with antizymotics. In both wards there was a mortality of about seven per cent.

Of antipyretic drugs, quinine still holds a firm place. Herard, Gee, and Jaccoud are among those who still express their preference for it. On the other hand, Unverricht, Legouest, Blot, Hardy, and Dujardin-Beaumetz either dislike its effects or prefer some other antipyretic. Desplats, Dujardin-Beaumetz, and Vulpian decidedly favor the use of salicylic acid, or one of the salicylates; but Dr. James Fergusson has expressed the opinion that they increase the tendency to intestinal hemorrhage. As regards the pure antithermics, such as antipyrin and thallin, Professor Jaccoud has recently asserted, in a paper read before the Académie de Médécine, that they have absolutely no effect upon the course of the febrile disease, and are no real acquisitions to therapeutics. In this opinion he is beginning to find many supporters.

The use of disinfectants or germicides in typhoid fever is not a new one, but it has of late had some very enthusiastic advocates.

Among these are Remonet, who began the treatment in 1880, and who advocates the use of large doses of phenol (gr. xv., once to thrice daily given in enemata). Other believers in this drug are Dr. Amet, Professor Cantani, who claims that it will abort the fever in many cases, and Pécholier. On the other hand, many prominent therapeutists have expressed themselves decidedly against it, and certainly the use of large doses has not gained any foothold with the profession. The administration of carbolic acid and iodine in moderate doses, however, has numerous advocates in Germany and elsewhere. The formula of Rothe, which was published in THE MEDICAL RECORD a few years ago, has become popular. In this country, Drs. Bartholow and James Wilson recommend the use of the two drugs, and Geissler mentions reports in its favor by Klammann, Raymond, Kurz, and Sansom.

The latest addition to drugs of this class is naphthaline, which has been reintroduced into therapeutics by Professor Rossbach. This cautious observer believes that it will have the effect of shortening or even aborting attacks of typhoid fever in some cases. Dr. Götze, of Jena, gives some facts in corroboration of such a view.

One cannot but be struck with the large amount of evidence that has gradually been collected in favor of such germicidal drugs as phenol, phenol and iodine, naphthaline, and perhaps we might put in this category salicylic acid and calomel. For three of them, viz., salicylic acid, phenol, and naphthaline, effects abortive to the fever have been claimed. It is safe to conclude, at any rate, that only agents of this disinfectant class affect the course of typhoid, and that all forms of antipyretics seem only to lessen the severity of the symptoms. From the present evidence it would appear that fresh air, careful employment of nourishment and stimulants, the rational occasional use of antipyresis, and the *systematic* use of some disinfectant constitute the best treatment now known for typhoid fever.

THE LADIES' TIPPLE.

THAT popular abomination known as "Beef, Iron, and Wine," which is now sold so extensively, not only by druggists, but by tradesmen of various kinds, deserves a little special attention from the medical profession. It is an agreeable mixture to the sight and taste; its name is a triple combination of seductive mononyms; while, taken into the stomach, it acts as a gentle "pick-up" to the worn and over-sensitive nerves of the ladies. It has in consequence become a popular, if not a fashionable, tipple, and is indiscriminately used to an extent that is, we believe, not entirely free from danger. Every medical man knows that the amount of actual beef or food in these various preparations is insignificant, and that it is the wine, after all, that makes them liked, and that leads so many persons to purchase their second bottle.

There is no good reason why this mixture is allowed to be sold by those unlicensed to sell wines, and if the law supports the practice it is the duty of physicians at least to try and lessen it. Inebriety can result from these tipples.

A STORY WITH A MORAL.

THE wicked do not always prosper, and it is not always safe to visit a patient whom you have never seen before, and criticise the treatment of the family physician. The following tale, which we find related in the *Journal de Médecine de Paris*, is illustrative of this fact.

A young cavalry officer had sustained a severe compound comminuted fracture of the leg some years ago, and although he was able to attend to his duties, suffered at times from the passage of little spiculæ of bone from the wound. One evening he was taken with fever and sore throat, and Dr. Danet, the family physician, saw him and prescribed for an acute pharyngitis. The following day the patient felt well, but in the evening had a fresh attack of fever, the pain, however, being at the seat of the old fracture and not in the throat. The part was red and hot, and the patient complained bitterly of the pain. A surgeon was now called, without the knowledge of the family physician, and gave as his opinion that the trouble was due to the presence of a loose splinter of bone, and ordered poultices. Dr. Danet was now summoned, and knowing the patient well, and being aware that he was of a rheumatic diathesis, was reserved in his diagnosis, and prescribed anti-rheumatic remedies.

As the man did not recover at once, the family became somewhat anxious, and called a well-known professor, who saw the patient in the absence of Dr. Danet. He said at once that there was nothing to do but to cut down and resect a portion of the tibia. The family physician called, as usual, soon after, and was not pleased when he heard of what had happened. He removed the poultices, told the patient to continue his quinine and salicylate, and assured him that the trouble was rheumatic. In two days the young officer mounted his saddle as well as ever.

MORAL: Don't be unkind to the general practitioner.

THE PHYSICIANS OF PHILADELPHIA number 2,500. New York has about 2,900.

News of the Week.

THE CLUB SYSTEM OF MEDICAL ATTENDANCE IN BERLIN.—The statement is made in an exchange that a club of 4,800 members, in Berlin, recently advertised for six medical officers to attend them at a salary of $375 per annum each. This would make the contribution from each member of the club about seventy-five cents a year for medical attendance. More than four hundred doctors applied for the places.

THE LATE DR. CARPENTER died by accident in connection with the use of a hot-air bath at home. The safety-lamp of his bath being out of order, he extemporized a lamp with common spirit in a gallipot.

ONE OF PASTEUR'S PATIENTS DIES.—A cablegram of the 6th inst., from Paris, says: A girl who was bitten by a mad dog, and subsequently inoculated by Dr. Pasteur, has died of rabies. Dr. Pasteur explains that thirty-six days having elapsed before she was inoculated, the period of incubation had expired, and the treatment was therefore too late.

HYDROPHOBIC INOCULATION.—The daily papers telegraph the criticisms upon Pasteur's preventive inoculations for rabies made by female writers of fiction, like Ouida, and female writers of anti-vivisection nonsense, like Dr. Anna Kingsbury, whoever she may be. All the points, and more, made by these critics were made with scientific precision by Dr. Jules Guérin at the time Pasteur first announced his discovery; and they have also been made in the columns of THE RECORD. The Associated Press bows somewhat too profoundly to lovely woman.

THE LATE WILLIAM H. VANDERBILT.—The medical profession will remember with gratitude that the late Mr. Vanderbilt's largest known gift, half a million of dollars, was to a medical institution—the New York College of Physicians and Surgeons.

THE NEW CREMATORY near this city was first used last week for the incineration of a human body. It did not work perfectly, but it is expected to do so.

INTUBATION OF THE LARYNX IN MEMBRANOUS CROUP.—Dr. F. E. Waxham, of Chicago, reports six cases of croup in which intubation of the larynx was practised according to the method suggested by Dr. O'Dwyer. Two of the patients recovered.

MEDICAL AND SURGICAL HISTORY OF THE WAR.—The manuscript of the third medical volume of the "Medical and Surgical History of the War," and the last of the series, is now well advanced toward completion; its earlier chapters are in the hands of the printer. The work will probably be ready for issue during the coming winter.

THE CLEVELAND MEDICAL GAZETTE is the title of a new medical monthly edited by Drs. A. R. Baker and S. W. Kelley, and published in Cleveland, O. There are, we are told, four hundred physicians in Cleveland, and the *Gazette* intends to be a "live local journal."

THE NEXT SERIES OF CARTWRIGHT LECTURES will be delivered by Dr. William Osler, of Philadelphia. So far no practising New York physician has delivered this course.

THE U. S. ARMY MEDICAL LIBRARY now contains 72,219 bound volumes and 95,923 theses and pamphlets.

THE FIRST SESSION OF THE AMERICAN PUBLIC HEALTH ASSOCIATION.—The American Public Health Association met in its Thirteenth Annual Convention in Washington, D. C., December 8, 1885, with Dr. James E. Reeves, of Wheeling, W. Va., President of the Association, in the chair. When the Convention had been called to order by the President, Dr. Townshend stated briefly the arrangement made by the local committee for the meeting and for the entertainment of members. About one hundred and twenty-five new members were then elected. The first paper read was on "Sanitary and Statistical Nomenclature," by Dr. E. M. Hunt, Secretary of the State Board of Health, Trenton, N. J. It contained suggestions as to restrictions to be placed upon the meaning of various terms used in sanitary reports. The next paper presented was by Dr. J. S. Billings, U.S.A., in which he suggested changes and improvements in, forms of tables for vital statistics. Dr. Henry B. Baker, Secretary of the State Board of Health of Lansing Mich., read a paper on "The Relations of Rainfall and Water-supply to Cholera." Dr. Baker's paper was illustrated by several statistical tables and diagrams based upon the statistics of cholera in Calcutta from 1865 to 1884, inclusive, and the meteorological reports for the same period. These tables showed that cholera and rainfall bore a statistical relation, the mortality being greater in seasons of little rain and *vice versa*. The tables showed also that the mortality was greatly reduced upon the introduction in late years of a good water-supply. Dr. D. E. Salmon then read a paper on "The Virus of Hog Cholera," in which were given in detail the experiments made by the Bureau of Animal Industry. The Hon. Erastus Brooks, of New York, said this was a commercial as well as a sanitary question. He referred to the action of the French and German authorities in prohibiting the importation of American pork. He heartily urged that the subject should be further discussed. Dr. T. S. Verdi, of Washington, a homœopath, said the assumption that our animals arrived in Europe in a diseased condition was only an excuse to keep out the American cattle. Mr. Brooks said that while this was probably true, it was not the whole truth. The alleged improper packing of pork, rendering it unfit for use when it arrived in France, was the avowed cause of the prohibition in France. He referred to the tariff duties imposed here as tending naturally to retaliatory measures. He thought it was our duty to see that food sent abroad was properly packed. Dr. Reed, of New York, offered a resolution recommending legislation, national, State, and municipal, to provide protection for the people against the sale of diseased meat.

THE QUESTION OF QUACKERY IN ENGLAND.—We read in the *Medical Press and Circular* the following from a correspondent of that journal: "Sir—I am not aware of any subject of such vital importance to qualified and registered practitioners as the large and ever-increasing number of quacks in the United Kingdom, but particularly in England." Yet we are told by an Anglo-Californian that quackery is almost unknown in England, and that the *Medical Register* settles the status of every one at once. Concerning this, the correspondent adds later: "Few lay persons, of whatever social position, are aware of the existence of that legal publication, the *Medical Register*, nor does the General Council apparently care whether they are or not."

A COLLECTIVE INVESTIGATION OF YELLOW FEVER in Peru has been set on foot by the Lima Academy of Medicine.

DEATH IN A DENTIST'S CHAIR FROM NITROUS OXIDE.—A French dentist, named Duchesne, has got into serious trouble owing to the death of a patient while under the influence of laughing-gas.

LADY MEDICALS AND THE DRAMA.—The Parisians, says the *Hospital Gazette*, have been enjoying a good laugh lately at the expense of the ladies, or rather at the medical portion of the gentler sex. The occasion for the mirth is a most humorous comedy which has been produced recently at the Gymnase Theatre, entitled, "The Female Doctor," and which deals with this modern excrescence of social life in a most amusing and ridiculous manner.

A NEW HYPNOTIC.—M. Dujardin-Beaumetz having tried it in only nine cases comes forward with the announcement that phenyl-methyl-acetone is an excellent hypnotic, and in alcoholism superior to chloral. It is given in doses of five to fifteen centigrammes.

THE CAUSE OF THE POISON OF THE CHOLERA BACILLI.—MM. Nicati and Rietsch have discovered toxic ptomaines to result from the growth and activity of the cholera bacilla when cultivated in broths and peptones. These toxic products when injected into mice killed them. Nicati and Rietsch support Koch in his views of the specific character of these bacilli.

ABOUT THE TRUTH OF IT.—Client (to Lawyer)—I am afraid the physician's testimony will convict me. Lawyer (reassuringly)—Don't be alarmed about that. I'll read up a little about poison in the stomach, and in ten minutes I'll have that doctor in a cold sweat, and make the judge and jury think he is a hired perjurer.—*New York Sun.*

A MUCH-BITTEN ANTI-VIVISECTIONIST.—The lady secretary of the Anti-vivisection League of England argues, in a letter to M. Pasteur, that cauterization removes all danger of hydrophobia. Her son once, and she herself five or six times, have thus escaped the malady, and both offer to be bitten by any mad animal in M. Pasteur's laboratory on condition of being allowed to treat the wounds themselves.

THE AMENITIES OF THE PROFESSION IN TEXAS.—This professional item appears in the Texas *Courier-Record of Medicine:* "Dr. Palmer, who, in a fight with Dr. Calloway at Blooming Grove, had the end of his finger bitten off by the latter, is in a critical condition owing to blood-poisoning having set in. The finger was amputated, but it is thought this will not save his life."

DEFENCE OF AN ANTI-VACCINATOR.—Dr. M. M. Mitivier, of Montreal, sends us a long communication defending the character and scientific attainments of Dr. Emery Coderre, who has acquired some notoriety in the anti-vaccination cause. Our correspondent informs us

that Professor Coderre is a gentleman of profound and extensive knowledge, and of an admirable personal character. All of which we are pleased to learn and record. None the less can we doubt that he has not a judicious mind, and that, if reports are true, he has been a source of discord and mischief in Montreal.

PROTESTS FROM ANTI-VACCINATIONISTS.—We have received several communications from indignant anti-vaccinationists protesting against our position in assuming that the utility of vaccination is established and need not now be discussed. One esteemed correspondent writes: "I am a reader and a hearty admirer of THE RECORD, but I must say if there is anything contemptible and high-handed treason in this world, it is the way in which you treat the subject of vaccination. You 'hold the fort' to suit yourself, at the head of a popular journal, and do not allow both sides to be fairly presented." To this we can only say that, to all persons who are capable of weighing evidence the utility of vaccination is perfectly demonstrated, and it is a waste of time and space to open our columns to its discussion.

A GERMAN VIEW OF THE INTERNATIONAL MEDICAL CONGRESS.—The German medical profession is much exercised about the International Medical Congress to be held in 1887 in America. The original Central Committee had for its president Professor Austin Flint, and for its secretary Dr. Billings, and numbered the best-known names in America. Unfortunately, the difference between the Old Code and the New Code of medical ethics have made themselves felt anew. The chief difference lies in the relationship of the profession to homœopaths and irregular practitioners. Besides, a desire was expressed to have separate representatives of each State—a geographical representation. Thus, although the original Committee was nominated by the American Medical Association, a new Committee has been formed, with Dr. Shoemaker at its head. Every one of importance on the older Committee has declined to belong to the new one. Germany has been appealed to to support the old Committee, which it does unhesitatingly. The *Berliner Klinische Wochenschrift*, No. 43, pleads that there is yet time to mend matters, for the American Medical Association meets again next spring.—*Brit. Med. Journal.*

A COUNTRY WITH FEW DOCTORS.—The number of legally qualified practitioners in Finland is, at the present time, 187. From 1640 to 1750 there was only one legally qualified man, a medical professor at Abo (without counting naturalized military surgeons). In 1750 the number increased to three or four, but at the close of the last century there were about twenty practitioners.

COCAINE IN SEA-SICKNESS.—A good deal of evidence is coming in as to the value of cocaine in sea-sickness. It is given in doses of gr. $\frac{1}{4}$ to gr. $\frac{3}{4}$ in solution, or in capsules.

VIRCHOW ON SPECIALTIES.—In his recent address at the anniversary of the Berlin Medical Society, Professor Virchow said: "Since that time [twenty-five years ago], the great host of specialties has developed in Germany, and it would be in vain, anyhow fruitless, to oppose this tendency; but I think I ought to mention it here, and hope I shall be certain of the approval of all of those present, when I say that no specialty can flourish which separates itself entirely from the common source of science; that no specialty can develop fruitfully and beneficially, if it do not ever and anon draw from the common fountain, if it do not take the other specialties into account, and if all the specialties do not mutually assist one another; thereby, a fact which is perhaps not always considered necessary for practice, receiving knowledge through that unity on which our position internally, and I can also say externally, rests. For, gentlemen, it would be the most foolish and most dangerous development, if the system of specialties should ever come to such a pitch that special schools were founded in which special branches were taught without any knowledge of other things offered us by the science of medicine."

THE INTERNATIONAL MEDICAL CONGRESS OF 1887.—A meeting of members of the medical profession interested in the International Medical Congress in 1887, to which prominent medical men from a number of cities were invited, was held at the Hall of the College of Physicians, Philadelphia, December 4, 1885, Dr. D. Hayes Agnew in the Chair. It was stated that official notice had been given of the election, as members of the present Executive Committee of the Congress, of Drs. J. S. Billings and J. M. Browne, of Washington, D. C.; Christopher Johnston, of Baltimore; George J. Englemann, of St. Louis; and J. M. Da Costa and William Pepper, of Philadelphia. Sincere regret was expressed that hasty action on the part of the Association, and the introduction of false issues, had imperilled the success of the Congress. It was made entirely evident, however, that the acceptances of the above elections would not be regarded as affording any adequate guarantee for the future scientific conduct of the Congress, and consequently would not be followed by any co-operation on the part of the leading members of the profession now unwilling to join in that work. As to the reorganization of the Congress, it was the sense of the meeting, unanimously expressed, that if the present Executive Committee should unite with them the Original Enlarged General Committee, and recommence the organization *de novo*, this course would insure the desired result. This is little better than a forlorn hope.

THE USE OF CARBONATE OF AMMONIA IN CEREBRAL HEMORRHAGE, EMBOLISM, AND THROMBOSIS.—Dr. R. C. Van Wyck, of Hopewell Junction, N. Y., writes: "In your journal of Nov. 21, page 568, on the 'Use of Carbonate of Ammonia in Cerebral Hemorrhage, Thrombosis, and Embolism,' the dose used by me is given as five grs. in 3 ss. (half drachm) of solution liquor ammoniæ acetatis; it should be ℥ ss. (half an ounce) of liquor ammoniæ acetatis. In passing, permit me to say that since this article has appeared in *Gaillard's Medical Monthly*, I have treated successively two other cases in persons of advanced years, both females, aged eighty-two and ninety-three years respectively. Both of these cases are now able to dress themselves and go up and down stairs and around the house by the aid of canes—the older, using two canes, is quite lame; the younger one using only one, and then sometimes omits that. She has been to her son's house visiting, a distance of three miles over very rough mountain roads."

Reviews and Notices.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK FOR THE YEAR 1885. 4to, pp. 400.

THE usual arrangement of matter is followed in this volume. Of particular interest to New York City physicians are the memorial addresses on the late Drs. Willard Parker, James R. Wood, John Glover Adams, and Joel Foster. Among the papers published there is the usual variety of subjects. Dr. Vanderveer's paper on "Personal Observations on the Work of Mr. Lawson Tait," is very interesting reading. The discussion which followed this paper showed that many of the Society members were not ready to follow Mr. Tait in discarding antiseptics altogether, and relying on mere surgical cleanliness. Dr. Howe's paper on the "Effect of Cocaine upon the Healing of Wounds" states at its conclusion, that "in lesions of the conjunctiva perfect solutions of hydrochlorate of cocaine have no appreciable effect, beneficial or otherwise, in the healing process." In corneal lesions it is an inferior mydriatic to atropine. Its inferiority in wounds of the iris is also noticeable. The volume closes with a copy of the Laws of the State of interest to the medical profession enacted by the Legislature of 1885.

MANUAL OF THE DISEASES OF WOMEN. Being a Concise and Systematic Exposition of the Theory and Practice of Gynecology. By CHARLES H. MAY, M.D. Pp. 349. Philadelphia: Lea Brothers & Co. 1885.

To judge from the number of condensations of the various branches pursued in medicine, the demand for this kind of literature, that is, "the concise and systematic," is very great. The present volume, viewed in the light in which it presents itself for consideration, is successful, and will commend itself to students cramming for examination, or preparing for quiz classes.

That it will win for itself a place among practitioners can scarcely be hoped, since the questions that arise among them are generally such as are not answered in text-books, or those volumes which take only a cursory view of the subject.

DIABETES MELLITUS: A Synopsis of its Pathology, Physiology, Etiology, Incipient and Progressive Symptoms, Causes of Death, Sugar Tests, and Treatment. By HARVEY J. PHILPOT. Pp. 112. London: Sampson Low, Marston, Searle & Rivington. 1884.

THE title explains the contents of the monograph under consideration. It adds little that is new to the subject of which it treats. A careful perusal of its pages leads the reviewer to question why the author, who states that he does "not pretend to propound new theories of his own, nor herald any infallible remedy for this perplexing and harassing disease," ventures upon a work which has been so well done in the many books of general medicine.

CLINICAL THERAPEUTICS — LECTURES IN PRACTICAL MEDICINE. Delivered in the Hospital St. Antoine, Paris, France, by Professor DUJARDIN-BEAUMETZ. Translated by E. P. HURD, M.D. Pp. 491. Detroit, Mich.: George S. Davis. 1885.

THIS volume includes the clinical therapeutics of nervous diseases, of general diseases, and of fevers. It is introduced by an author's preface, in which he alludes with satisfaction to the success of the work, it having already run through four editions in France, and been successively translated into Spanish, Italian, and Greek, as well as into Russian. He thanks the translator, Dr. Hurd, for "the assiduity, painstaking, and accuracy" with which he has done his work. This is not an idle compliment, as those who put to it the severer test of a knowledge of the mother-tongue will say. The work of translating has evidently been done with an enthusiasm which can only be felt when the translator is in perfect *rapport* with the author.

In the translator's preface is a very pleasant and comprehensive *résumé* of the various publications of Dr. Dujardin-Beaumetz, which number thirty-two. Among them are many important monographs embracing a wide range of subjects.

The "Leçons de Clinique Thérapeutique," published in Paris from 1879–85, is the most important of his works. The first volume treats of the therapeutics of the diseases of the heart and digestive tube; the second, of the diseases of the liver, kidneys, and lungs. The work under consideration is the third volume of the series.

The author has been extremely happy in the manner in which he has correlated physics, anatomy, histology, physiology, and pathology with the therapeutical aspect of the subject with which he is for the time dealing. He sketches these accessories with a bold and masterly hand, in order to throw into a greater prominence the treatment of the disease, which never loses its central place in the foreground.

These can be considered models of what therapeutical lectures should be, namely, a clear, succinct, and careful exposition of the remedies and measures found useful in the relief of the various diseases to which a physician is called to minister, with a sufficient consideration of the physiological facts to show that these remedies and measures are used in consonance with theories dictated by reason and intelligence.

APPLIED MEDICAL CHEMISTRY. A Manual for Students and Practitioners of Medicine. By LAWRENCE WOLFF, M.D., Demonstrator of Chemistry, Jefferson Medical College; Member of the German Chemical Society, the Philadelphia County Medical Society, the Philadelphia College of Pharmacy, etc. Philadelphia: P. Blakiston, Son & Co. 1885.

THE aim of this book is to set forth in a simple and concise manner the methods of chemical analysis, and to instruct the student in the practical application of the chemical principles set forth in the ordinary text-books. Only those subjects are treated of which have to do with medical chemistry, the object being to furnish to the student, in one small volume, the practical instruction suited to his wants, and which he would otherwise have to search for in voluminous treatises on general chemistry. The work is divided into five parts, dealing with Apparatus and Manipulations, the Chemistry of Poisons, Physiological Chemistry, Excretions and Concretions, and Sanitary Chemistry; there is also an Appendix containing a number of useful and labor-saving tables. The book is intended primarily for students, but it is one which the general practioner, who possesses only an average acquaintance with practical chemistry, cannot well afford to be without. The country practitioner, especially, who may at any time be called upon to analyze the tissues in cases of suspected poisoning, will find much to help him in the chapter on the chemistry of poisons. The fourth chapter, containing instructions on the analysis of the urine and fæces, is also one that will often be consulted with advantage.

MASSAGE IN HEADACHE.—Nordström says that certain forms of hemicrania, accompanied by points of induration and tenderness on pressure, are of muscular origin, and are due to chronic inflammation. In such cases he recommends massage, asserting that it never fails to give relief.—*Rivista Clinica*, No. 9, 1885.

SUBCUTANEOUS EMPHYSEMA IN CROUP.—Dr. Franz Torday, reports in the *Orvosi Hetilass*, No. 35, 1885, a case of a child, three years old, who was suffering from laryngeal diphtheria. One morning, after the patient had had a number of very severe suffocative attacks, the writer noticed an elastic crackling tumor, the size of a hen's egg, between the scapula and the spinal column, on the right side. This gradually extended until the entire head, trunk, and upper extremities were involved in an emphysematous swelling. This gradually disappeared after the dyspnœa had subsided.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, November 11, 1885.

JOHN A. WYETH, M.D., PRESIDENT, IN THE CHAIR.

DR. WALDSTEIN, from the Committee on Microscopy, reported that he had examined the liver and mesenteric glands presented in behalf of a candidate at the last stated meeting, and that they were the seat of small, *round-celled sarcoma.*

THE President presented, in behalf of a candidate, a uterus removed from the body of a woman having *typhoid fever during the puerperal state.*

AN ENORMOUS DOUBLE HERNIA.

The President also presented a sac and a part of the genito-urinary apparatus, together with ten feet of the large and small intestine, which was in a double hernia measuring forty inches in its greatest diameter and weighing about five pounds. The patient was in the hospital two days. He was fifty-three years of age, German, married, and a cooper, and was admitted to Mount Sinai Hospital October 28, 1885. The patient stated that he had been ruptured on the left side for the last seven years, wore a truss for some time, and experienced no trouble from the hernia. During the last three years his scrotum had become distended and enlarged, and during the last six months he had experienced difficulty in passing urine. He said that he had been ruptured in the right side for three or four weeks. He had been unable to return the hernia on the left side during the last three years, and it had gradually increased in size. All operative interference was precluded on account of the general condition of the patient. The history was one of inflammation of the sac and rupture of the cæcum. Puncture of the sac and escape of gas gave considerable relief, and the patient was then kept under the influence of morphine to such an extent as to render him as comfortable as might be. The specimen was of interest anatomically on account of its enormous size, it being the largest which he had ever seen.

Dr. Wyeth had seen another case within a year, and in which the patient died in the same way with inflammation of the sac, death occurring from shock and sepsis due to rupture of the gut and extravasation of fæces into the sac. That patient was eighty-five years of age, and was a physician in active practice up to the beginning of his last sickness.

CHRONIC INTERSTITIAL MYOCARDITIS—CHRONIC INTERSTITIAL NEPHRITIS.

DR. JOHN C. PETERS presented microscopical slides and the history of a case which occurred in a man sixty-seven years of age, a bachelor, of slight figure, but who had always been in good health, was exceedingly careful of his clothing so as to protect himself against changes of weather, abstemious in his habits, but who always had a coated tongue and a great tendency to constipation. In early years he had suffered from fever and ague, and fancied that he had occasional returns of the difficulty.

About the 10th of May last he called to see Dr. Peters, who saw that he looked so sick that he forbade him going farther, as he had intended to do to transact some business, and sent him home. At that time the patient complained of distress, apparently in the stomach, which probably was due to the heart, and which he attributed to eating some salad that was slightly tainted. The patient soon had great difficulty in breathing, marked orthopnœa, but the temperature remained only slightly elevated, never rising higher than 102.5° F. Dr. Peters' first diagnosis was capillary bronchitis, with œdema of the lungs, more especially of the left lung. The patient quickly developed feebleness of the heart, which determined him to call counsel at once, and the conclusion was that the attack of bronchitis and œdema of the lungs had produced so much pressure upon the heart that dilatation of the right side had been produced suddenly. The consultants were Drs. Flint, Loomis, and Leaming. The urine was passed in large quantity, and it contained a few casts. Although his urine had been repeatedly examined every year, and examined a few months before the attack, nothing abnormal had been found. The patient slowly recovered, albumin entirely disappeared from the urine, breathing remained slightly impeded, always a little short of breath, and he was left with dulness on percussion and feebleness of respiration over the left side; and examining him from time to time, Dr. Peters thought he detected a friction murmur over the heart, and also over one pleural cavity, but these symptoms were not detected by either of the three consultants. In Saratoga, during the summer, he had another attack, from which he recovered and came home, and was able to walk about somewhat for a month or more. His urine was examined every day, but no trace of albumin could be detected. He then had another relapse, with great difficulty of breathing, with albumin in the urine, and died at the end of ten days.

At the autopsy the heart was found somewhat enlarged, with the pericardium adherent. From sixteen to twenty ounces of fluid were found in one pleural cavity, and a very small quantity in the other. There were no valvular lesions of the heart. There were some old pleuritic adhesions at the apex of the lung opposite the pleural cavity containing the largest quantity of fluid. Microscopical examination demonstrated the existence of chronic interstitial myocarditis, and also of chronic interstitial nephritis.

DR. PRUDDEN thought the fact that a person in this walk of life should have pleurisy and pericarditis without having given rise to symptoms was worthy of note, because such persons would be very likely to know whether or not they had been sick. Evidence of old and severe inflammations affecting the pericardium and the pleura, without any clinical history whatever, were very frequently found at autopsies on the bodies of persons from the lower classes of society, who were too poor to be able to stop work, and who went on without knowing that they were sick.

DR. VAN SANTVOORD asked concerning the specific gravity and the quantity of the urine.

DR. PETERS replied that the specific gravity of the urine was on an average about 1.020, and that at times the quantity was large. During the acute portion of some of his attacks the quantity was quite small.

DR. VAN SANTVOORD said he asked the question because not long since he made an autopsy in which he found pure fibroid change in the kidneys in a case in which the quantity of urine sank as low as ten ounces daily, and the amount of albumin was said to be merely a trace, thus showing how slight changes might exist in the urine even when the kidney lesions were exceedingly grave. There were also pleuritic adhesions, and the left ventricle of the heart was dilated and somewhat fatty. Death took place evidently from a large accumulation of fluid in the pleural cavity.

DR. WALDSTEIN said that those who had occasion to make many autopsies frequently found the condition of the kidneys described by Dr. Peters, without the clinical history of the disease. On the other hand, he would recall the discussion which occurred in the Society last year with regard to the quantity of albumin in the urine, and how often we had occasion to examine the urine of people who had not complained of feeling ill, and with negative results, and some day we are surprised to find an appreciable quantity of albumin in the urine. It would appear from that discussion, and from what was well known, that it was very important to examine the urine frequently before reaching any conclusion concerning the soundness of the kidneys.

THE PRESIDENT said that in the discussion to which Dr. Waldstein referred, Dr. Janeway reported a case which came under his observation, one in which there was the most remarkable manifestation of albuminuria which he had ever witnessed. Dr. Janeway finally found that it depended upon mental effort of any kind, and so susceptible was the patient to the influence of mental work that albumin appeared in the urine after reading a page or two of something which engaged his attention.

DR. WESLEY M. CARPENTER said he had had occasion to examine microscopical sections similar to those which Dr. Peters had presented, and had found that the fibroid degeneration of the heart extended from the endocardial surface, with the muscular tissue in a normal condition close up to the pericardium, which was thickened and adherent. The kidneys showed a marked increase of intertubular tissue, but the epithelia were in a remarkably good condition; for the most part the epithelial cells were in position, their nuclei were distinct, and the free borders of the cells had undergone only very slight disintegration. In general there was only a very slight amount of granular matter within the lumina of the tubules, what there was being due probably to the process of hardening.

DR. VAN SANTVOORD presented a specimen of

HYDROCELE

removed from the body of an infant two months of age and a foundling. It was brought into the asylum at the age of one month, with a hydrocele which extended as far upward as the external ring upon both sides.

Dr. Van Santvoord also presented a specimen of

LUPUS OF THE LARYNX,

taken from the body of a boy, fourteen years of age, who had been an inmate of Randall's Island Hospital for a number of years. He had lupus of the nose, which gradually progressed, and at the time of death it had destroyed entirely the nose, the upper lip, and the alveolar process between the canine teeth, the hard and soft palate, and the nasal septum, and the body of the sphenoid was entirely bare and rough. In the pharynx no lesion could be observed. In the larynx was found a general thickening of the mucous membrane, and that lining the ventricles and their immediate neighborhood was dotted over with a number of small, nipple-like elevations, the summits of which were about the size of a medium-sized pin-head. The immediate cause of death was a marked feature of interest in the case. The boy had lived until about three days of his death in comparative comfort, and then developed intense headache, which passed on to delirium, coma, and death. On removing the calvaria it was found that the base of the brain was coated with a thick, dense layer of lymph, the distribution of which was about the same as that seen in tubercular meningitis, although no tubercular lesions were observed. The dura mater over the cella turcica was dark, sloughy looking, and the body of the sphenoid was necrotic. The lungs were œdematous, and the heart was fatty; the liver, spleen, and kidneys were markedly waxy; the mucous membrane of the small intestine was somewhat thickened, but gave no distinct reaction to iodine, and the large intestine appeared normal.

The case was of some interest with regard to the alleged identity of lupus and tuberculosis. In view of the extent of the lesion and the absence of general tuberculosis, it seemed to Dr. Van Santvoord that the case might be accepted as one pointing toward the non-identity of the two affections.

DR. PUTNAM-JACOBI remarked that the absence of general tuberculosis should not justify skepticism concerning the tubercular nature of lupus, for the absence of general tuberculosis was the rule in all cases of external local tuberculosis. Although Hueter had urged the excision of bone rendered carious through tubercle, as an important element of prophylaxis against general tuberculosis, saying that this was to be considered, even if only one case in twenty were really liable to become tuberculous. Yet König, in his monograph on osseous tuberculosis, has shown that out of one hundred and sixty-eight cases observed by himself, generalized infection occurred in only sixteen; and in all these it followed an operation for the relief of the local disease. The proportion of liability in König's statistics doubles that suggested by Hueter—1 to 10 instead of 1 to 20. But in both the proportion of cases is very large where a lesion, unquestionably tubercular, remained throughout limited to the locality at which it first manifested itself. There would be, therefore, nothing extraordinary in lupus, though a tubercular disease, following the same rule.

DR. VAN SANTVOORD said he did not wish to be skeptical with regard to the identity of the two affections, but he simply spoke of the case, from a clinical standpoint, as one which might throw some doubt on the supposed identity of the two affections. He was not permitted to remove the sphenoid bone, and therefore it could not be examined for bacilli. The other half of the larynx was in the hands of Dr. Biggs for examination.

THE PRESIDENT said with reference to the question of propriety of operative interference in tuberculosis of bones, in order to prevent a general dissemination of the disease, it was one which was generally accepted among surgeons in New York, and that a bone suspected of being the seat of tubercular osteitis should be operated upon early for the purpose of removing the infective foci.

DR. VAN SANTVOORD said that the character of the process in the larynx and in the region of the ventricles was confirmed by the description given by Turck, and certainly was one which did not resemble what he had been accustomed to see in tubercular disease of the larynx. He did not know that that distinction was one which could be borne out by a large number of cases.

DR. PRUDDEN said the question was one to be decided by microscopical examination. It had been shown that tubercle bacilli were present in a large proportion of cases of lupus, and if it was understood that the tubercular lesion was caused by the presence of the tubercle bacillus it had been established that lupus was tuberculosis.

CANCER OF THE STOMACH—TUBERCULOSIS OF THE RETRO-PERITONEAL GLANDS.

DR. WALDSTEIN presented two microscopical slides illustrating two different diseases in the person of a man who, when he was sixteen years of age, had chronic pneumonia involving the left apex, and from which he recovered without its leaving any evidence of its existence. He remained well up to two years ago, when he suddenly showed signs of what he thought was intermittent fever, and for the last two years he had this fever appearing every other day, and was treated by all known antipyretics without the least effect on the course of the symptoms.

When he was examined first, two years ago, there was detected a tumor a little to the right of the median line, and the physician reached the conclusion that it was a case of cancer of the stomach without having developed any dyspeptic symptoms. In fact, his digestion was perfect, with the exception of these consecutive derangements which took place from time to time accompanied by fever. Many physicians saw the case in consultation, and the last one, to whom Dr. Waldstein was indebted for the notes of the case, thought he detected an enlargement in the abdomen which seemed to be continuous with the tumor in the epigastrium.

Here, then, was a case considered as one of cancer of the stomach, accompanied by a peculiar form of fever, and also there were tumors found in the abdomen. It was regarded as impossible to reach any positive conclusion concerning the exact character of the case.

At the autopsy a caseous focus was found in the apex

of the left lung, encysted and dry. The bronchial glands were enlarged, and contained many caseous spots. The stomach contained diffuse carcinoma which had no tendency to ulceration, but, on the contrary, the connective-tissue had proliferated more and more, and developed a scirrhous form of affection, and therefore it was easy to understand why the gastric symptoms were not marked.

The retro-peritoneal glands were very much enlarged and degenerated, and contained a great amount of cheesy matter.

This, therefore, was a case where cancer of the stomach existed, which by its nature gave rise to no clinical symptoms; besides, there was caseous degeneration in the retro-peritoneal glands, tubercular in character, without any sign at all of metastasis. It seemed, therefore, that the two diseases had run parallel with each other.

DR. JOHN C. PETERS remarked that it was once regarded that the presence of one excluded the existence of the other.

THE PRESIDENT said it had been stated that one retarded the progress of the other.

DR. PUTNAM-JACOBI said that Beneke had attributed the predisposition to tuberculosis to the fact that the arteries of the body were all too small; while in the cancerous diathesis they were as much too large. Now it was evidently impossible that any one's arteries should be at once too large and too small, and hence the habitual antagonism of the two diatheses.

DR. R. W. WILCOX said, therefore the danger in an individual having normal arteries was that he was liable to both diseases.

DR. T. MITCHELL PRUDDEN presented a specimen with the following history:

NECROTIC CYSTITIS.

The specimen was taken from the body of a married woman, aged about thirty, who had a child about two years before her death, and who had been suffering for many months with necrosis of the bones of the left side of the face.

In the last months of life she had paralysis of the right side of the body; complained of pain very low in the back. At one time had difficulty in passing water, so that the catheter was used for some time. Latterly, however, she had urinated without difficulty. Examination of urine showed albumin. Microscopical examination was not made. With the exception of the difficult micturition there were no symptoms referable to the bladder.

At the autopsy were found a tumor involving nearly the entire left side of the pons Varolii, pachymeningitis purulenta over the petrous and posterior portion of the sphenoid bones, purulent meningitis at the base of brain. General peritonitis, with the production of a considerable amount of fibrin and little pus, and the condition of the bladder shown in the specimen, namely, *necrotic cystitis*.

The bladder was dilated and filled with turbid urine. The mucous membrane, in general, was moderately thickened and irregularly mottled with red patches.

Surrounding the urethral orifice was an irregular circular area, entirely denuded of epithelium, about three inches in diameter, which was covered with a delicate œdematous pellicle of connective-tissue, which was irregularly streaked and mottled with a yellowish-white material.

At the edges of this area the intact mucous membrane was thickened and infiltrated with pus, so that the above-described patch had a tolerably distinct, irregular, yellowish-green border.

In places the musculosa near this patch was infiltrated with pus, and beneath it was itself necrotic.

On microscopical examination the above-described patch was seen to consist of a small amount of fibrous tissue, with whose bands were intertwined numerous elastic fibres. Scattered in the meshes of this tissue were numerous crystals of urinary salts, and concentrically striated disks or globules of leucin. It was these latter substances which gave rise to the irregular yellowish streaks and patches described above. It will thus be seen that the abnormal patch of tissue at the neck of the bladder is a portion of œdematous submucous tissue, infiltrated with urinary salts, etc., and bordered with a narrow zone of purulent inflammation.

The specimen is an excellent example of localized necrotic inflammation of the bladder occurring in a paralytic, a form of lesion which is by no means uncommon.

It is of especial interest, however, because it shows the condition of affairs which precedes the casting off of the slough, a state of the lesion which we do not often see. This casting off of the slough, as is well known, may take place piecemeal, or a large patch may separate and come away as a single sheet of necrotic tissue, as was the case in an interesting specimen presented by Dr. Boldt at a recent meeting of the Society.

I present this specimen not only on account of its intrinsic interest, but also because it supplements, in a most instructive manner, Dr. Boldt's specimen, and confirms the truth of the conclusion arrived at by the Microscopical Committee, as reported at the last meeting.

The Society then went into executive session.

Correspondence.

OUR LONDON LETTER.

(From our Special Correspondent.)

THE BOWMAN LECTURE—THE DECENNIAL REPORT OF THE REGISTRAR-GENERAL—DR. WILKS ON THERAPEUTICS—COCAINE AND ITS DANGERS.

LONDON, November 21, 1885.

THE "Bowman Lecture" for this year at the Ophthalmological Society has just been delivered by Dr. Hughlings Jackson. Dr. Jackson commenced his lecture by referring to the question of the division of labor. Things, he said, became increasingly complex. There was no exception. Our profession was now very complex, and he instanced the various specialties. As to specialists, he said the specialty of each came out of, and was a differentiated part of, a wide general knowledge. Specialists, he remarked, had to justify themselves. According to Spencer, the factors in progressing evolution were (1) increasing differentiation, (2) increasing definiteness, (3) increasing integration, and (4) increasing co-operation. That the ophthalmic surgeon had justified himself in the second factor of evolution needed no proof. Then as to the third factor. Each different definite medical worker was working for the whole body medical. His work led to the greater integration of the knowledge of other workers. Each worker helped all the others. For instance, Argyll Robertson had given to neurologists, not merely a new symptom, but a means of investigation of several important diseases. This debt had been paid back by neurologists (Westphal and Erb) who, working in a different field, had shown the diagnostic value of loss of the knee-jerk. Going on to the fourth factor in evolution (increasing co-operation), Dr. Jackson then said each different worker, knowing one subject best, of necessity could not have the precise knowledge of other subjects which other different workers had. Division of labor rendered co-operation necessary. The whole of one disease was best understood by bringing to bear on its direct investigation and treatment different workers in different fields. To give an illustration—the neurologist ought to be able to suspect hypermetropia as a cause of head-troubles, but only the skilled ophthalmic surgeon could accurately estimate and correct it.

We were apt, said the lecturer, to underrate the complexity of some nervous diseases. As an illustration of this, he selected epileptic paroxysms and their after-conditions, and remarked that the symptomatology of

the paroxysm was probably a universal symptomatology. It might be said that insanity was more complex than epilepsy, but this was not so, since epileptic paroxysms were not unfrequently followed by temporary insanity. The study of epilepsy, therefore, involved the study of some cases of insanity.

The various symptoms of epilepsy were then discussed at some length, with frequent reference to the experimental results obtained by various investigators in the field of practical physiology. Coming back, then, to the point from which he started, Dr. Jackson observed that it was not possible for a neurologist to scientifically study this exceedingly complex disease without availing himself of the work done by different specialists. The neurologist needed the aid of the psychologist, of the physiologist, and of the ophthalmologist. After detailing the various ocular symptoms, Dr. Jackson advanced an hypothesis, as to the organ of mind, at once ingenious and elaborate, but to which I cannot hope to do justice within the compass of a few lines. He submitted that we should adopt the hypothesis of evolution, according to which the whole nervous system was a sensori-motor system, representing all parts of the body, and suggested that all parts of the body were represented in each of three levels of evolution—representative, re-representative, and re-re-representative. We ought strictly to speak of four levels. Representation increased in differentiation (complexity), definiteness (speciality), integration (intricacy), and in number of inter-connections (co-operation) from lowest centres to highest centres ("organ of mind"). The "organ of mind" was nothing else than a series of centres representing or co-ordinating all parts of the body.

Reverting, then, to epilepsy as a disease of the organ of mind, Dr. Jackson showed how every organ of the body might be affected and every department of the nervous system involved.

The Report of the Registrar-General for England for the decennial period, 1871–80, has just been issued. I cull from it a few notes which may be of interest. The mean annual death-rate has fallen to 21.27 per thousand, yet the gain from this has been very unequally distributed. The male death-rate has fallen more than four, and the female death-rate just over six per cent. since the preceding decennium. But the gain has been more in the earlier than in the later periods of life, which indeed show an increase in the death-rate. Dr. Ogle, in a letter accompanying the report, attributes both the lessened death-rate and its inequality at different ages to the various sanitary reforms which have been pushed on of late years.

The death-rate from zymotic diseases has decreased, except that from whooping-cough and small-pox, respectively. The former has remained stationary; the latter shows an increase due to the epidemic of 1871–72.

During the past decennium there has been eight districts in England and Wales (out of 647), in which the mean annual rate was under fifteen per thousand, and ninety-three in which it was between fifteen and seventeen.

Some interesting information is given as to the varying mortality of different occupations. The first place for longevity is given to ministers of religion. I regret to see that the mortality of our profession is much higher (as 11 to 5).

Dr. Wilks has lately been giving an address before the Midland Medical Society, and saying some wholesome truths in his own inimitable way. I am afraid some of his statements were calculated—at any rate when freshly heard—to shock some of our modern therapeutists. For his part, he said, he did not wish for any more drugs. Of what use would they be to us? What was the use of putting edged tools into the hands of children who did not know how to use them? After referring to some of the errors of past generations, Dr. Wilks proceeded to give some modern illustrations. "I see," said he, "a lad with pleuritic effusion which has pushed down his liver; the medical man had overlooked the presence of water in the chest, but had discovered the liver below the ribs. He considered this to be enlarged, and gave the boy mercury to reduce it. Now, is it not fortunate that mercury had not the wished-for power in reducing a healthy liver to half its size? Again, I see people with osteitis deformans, and other cases where the bones are enlarged, and iodide of potassium is almost universally given, but it never does any good. Again, I exclaim, how fortunate is this! Could iodide of potassium absorb bone, what a responsibility would rest on the medical men who prescribe it, and in what a condition would all the skeletons of civilized people be! Another example, the hypertrophied spleen. Nearly all patients with this affection are given quinine and iodide and bromide of potassium, in order to reduce it. How thankful I am that these attempts are ineffectual; for if these drugs could absorb healthy spleen-structure, what a mass of people would now be spleenless!"

After experiencing a long run of success, coupled with unqualified laudation, cocaine is now beginning to have some drawbacks and dangers in its use pointed out. At a recent meeting of the Ophthalmological Society, Mr. Nettleship, ophthalmic surgeon to St. Thomas' Hospital, said his suspicions had been roused by the occurrence of a serious run of cases of panophthalmitis at St. Thomas' Hospital, while, at the same time, his cases at "Moorfields" did well. He attributed it to the use of cocaine. Several other ophthalmic surgeons confirmed Mr. Nettleship's experience. Mr. Story, of Dublin, suggested that solutions of cocaine might be made up with saturated solutions of boracic acid. It subsequently transpired, in the course of the discussion, that the solutions of cocaine are actually thus made at "Moorfields" Hospital.

PAPAL AND TALMUDICAL OPINIONS ON CRANIOTOMY.

To the Editor of The Medical Record.

Sir: A few days ago the daily papers reported from New York that the Roman Catholic physicians in that city were in receipt of a circular containing a declaration by the Pope that the killing of an unborn infant is never right, even when the life of a mother can be saved in no other way.

It may be of interest to learn the rabbinical view on this question which bears upon the surgical operation known as craniotomy, that is generally practised by the profession in cases where a choice is forced between losing two lives, and saving one by hastening the end of the other.

The *Mishna*, which is the name of the earliest collection of rabbinical opinions and decisions, compiled by Rabbi Jehuda Hanasi in the second century C.E., contains in tract *Oholoth* VII., 6, the undisputed decisions that, "in case of a dangerous parturition it is justifiable to kill the unborn infant in order to save the mother, as her life precedes its life." Such operation is, however, not permitted after the infant has already been partially born, as in the latter case the maxim applies: "One human life must not be set aside on account of another."

Rashi, the commentator of the Talmud, explains in Sanhedrin, folio 726, the reason of the distinction between these two cases in the following way: "The unborn infant is not yet a *distinct personality* with an *independent* life (*Nepheth*), hence the regard of saving the mother's life is to prevail; while in the second case its individuality is established, hence the legal principle must apply that one life must not be destroyed to save another." The authoritative Rabbinical Codes of Maimonides (twelfth century) and of R. Joseph Caro (sixteenth century) adopted the decisions of the Mishna as the rule of Jewish law.

It must be conceded that the rabbinical view on this subject is in full accordance with common sense and with the highest regard for the sanctity of human life.

DR. M. MIELZINER,
Professor in the Hebrew Union College.

CINCINNATI, November 25, 1885.

A NEW FIELD FOR YOUNG DOCTORS.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR: In a recent number of THE MEDICAL RECORD I noticed an article under the above heading, having especial reference to the new Congo Free State. I wish to say a few things concerning the field in the East.

There are a few ports out here where a young man could build up a good paying practice. I know of two such, while there are three others which would now furnish a living, with the prospect of a good increase; but it would hardly do to count on these places, as they might be occupied before any person who reads this might reach them. The work for foreigners in these parts is mostly in the hands of British practitioners, who have done very well financially, and usually dispose of their places to others of their own people before retiring to live on their accumulated wealth.

Another branch of the Eastern work is, however, quite open. A small handful of physicians are at present ministering to the 350,000,000 Chinese. A few are engaged also in Siam and Burmah, and recently Corea has been occupied by three of our profession. These persons are connected with some one of the missionary societies, and are doing a more extended practice than they could ever hope to do at home.

To any who may be moved by a missionary spirit, coupled with a love for their profession and a desire to be foremost in imparting its blessings to those who have it not, my remarks will well apply. None without such motives need consider the work. The question as to proper spiritual qualifications must be decided by the individual to whom the especial rewards of such a life-work will present themselves. I wish especially to mention some of the more temporal inducements of such a work.

In the first place the need is very great, and the missionary doctor has the consciousness of filling a long-felt want, which is more than he would probably be conscious of in work at home. His opportunity for gaining a wide medical and surgical experience is unparalleled. He has unlimited opportunities for continuing his scientific studies in interesting and unexplored fields, and of becoming an authority in various lines of research.

Socially, he may occupy a higher position than in practice at home, for while it is true that foreigners and often natives in the East look down upon the missionary when he comes as a preacher, they receive the doctor quite warmly. Should he chance to reside in a capital he will, doubtless, be called upon to visit the palace and treat its royal occupants. He will be on friendly, and probably intimate, terms with the consular and diplomatic service, together with the naval and military representatives of his own and other lands, thus gaining a polish and breadth of understanding that he might fail to get even in extensive travels. Away from the ports and capitals, he would still have the association of missionaries of various nationalities, and as these persons are usually "gentlefolk" in every sense of the word, the effect of association with them would be much the same as in the other case, while the medical and scientific inducements would be even greater.

It might be an inducement to know that the missionary physician is expected to live as a gentleman. It would never do to have him badly housed, as he is too expensive an article to be lost after going to the expense of sending him abroad and supporting him while he gets the language. For the same reason he must not be badly fed or clothed. His position demands intelligence, therefore he must take papers and other publications and read them. Servants are so cheap and good, and his time is so precious, that it would be folly for him to waste it in menial service; his position among both foreigners and natives would not allow of this either.

It must also be borne in mind that the East is not out of the world as it once was. India is as much like England as they can make it, further around we find many select little communities as at Singapore, Amoy, Foochow, Ningpo, Tientsin, Nagasaki, Kahe, and others, with their stores, telegraph, and newspapers, while at Hong Kong, Yokohama, and Shanghai we find genuine foreign cities with a great deal of oriental elegance thrown in, and with their very complete stores of all kinds, extensive shipping, telegraph lines, daily papers, cathedrals and churches, beautiful drives, and all manner of places of amusement, the foreign residents come to feel so contented with their new homes as to often prefer them to those they have left. These places form depôts from which missionaries in the interior are continuously supplied with fresh news and stores.

The qualifications necessary for the medical missionary work are health of body and mind, a cheerful spirit, good common sense and judgment, a thorough education and considerable practical experience, together with earnest sympathy with the work and consecration to it. It is very unwise for a young man to come to the East, direct from school, without any real practical knowledge. He may be at once called to treat some important personage, where he will feel his defects most keenly and may do something rashly that will greatly injure himself and his associates. If this be not the case he will, in all probability, be crowded with patients of a lower order, and what can a young man, with no experience and a head full of confused ideas, do with twenty to one hundred patients a day? He will profit by it in time, but it is a hard experience both for himself and his patients. For this work a man should have at least a year's experience in a first-class hospital, or its equivalent of outside practice. To such the way is clear and the East will accommodate all who may come.

H. N. ALLEN, B.S., M.D.,
H. C. M. Customs Surgeon.

SEOUL, COREA, October 8, 1885.

AVIARIAN SURGERY. — Dr. Walter F. Morgan, of Leavenworth, Kan., writes: "*Apropos* of the interesting article in your issue of the 7th ult., allow me to add another instance, which may be called aviarian surgery, related to the writer, in 1876, by the late Joseph O'Brien, Esq., of Cleveland, O. On going into his barn Mr. O'Brien discovered a swallow's nest, and being a natural observer and lover of animals, he climbed to the nest and found in it two young swallows, one being smaller and less vigorous than the other, and having a slighter covering of feathers. Upon taking the young bird in his hand, he was astonished to find one of its legs very thoroughly bandaged with *horse-hairs*. Having carefully removed the hairs one by one, he was still more astonished to find that the nestling's leg was broken. Mr. O'Brien carefully replaced the bird in its nest, and resolved to await further developments. Upon visiting the 'patient' the next day, the leg was again found bandaged as before. The bird-surgeon was not again interfered with, and the case being kept under observation, in about two weeks it was found that the hairs were being cautiously removed, only a few each day, and finally, when all were taken off, the callus was distinctly felt, and the union of bone evidently perfect, as the bird was able to fly off with its mates. Such instances may seem incredible to those not yet prepared to fully accept the axiom of the scientists, viz., 'that the intelligence of animals differs from that of man only in degree, and not in kind.'"

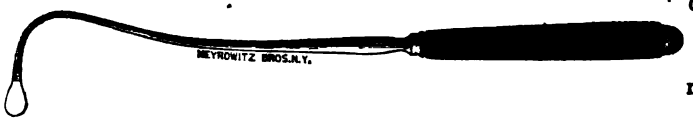
New Instruments.

A NEW PHARYNGEAL CURETTE.

By WILLIAM A. DAYTON, M.D.,

SURGEON TO THE EYE, EAR, AND THROAT DEPARTMENT, HARLEM DISPENSARY, ETC., NEW YORK.

No perfectly satisfactory instrument, so far as the writer is aware, has been devised for the removal of vegetations and adenoma of the pharyngeal vault.



The curette illustrated above has proved so useful an instrument in my practice that I am pleased to make it known.

The original instrument has been used by myself and friends for more than six months, and, in over thirty cases, it has effected all that could reasonably be expected.

The instrument is free from the objections to curettes, forceps, galvano-cautery, etc., used for the same purpose, in that *there is no danger of injuring the adjacent normal tissues.*

In contour the tip of this curette corresponds with the tip of a uterine curette, save that the former is more flattened on its convexity. It has one lateral (right) cutting edge, and is attached to a *flexible* shank, admitting of alterations in the curve to suit individual cases.

The shank should be so bent as to allow the tip to pass well up behind the soft palate; then the manipulation, which scarcely requires explanation, consists in rotating the instrument from left to right.

Upon withdrawing the curette, the diseased tissue removed will be held in the fenestra, and will not drop into the pharynx or larynx.

Except in the cases of nervous children, the operation can be performed without an anæsthetic. There is no pain whatever attending it. Again, the employment of a retractor is not necessary, as there is no danger of injury to the soft palate, etc.

The simplicity of the instrument forbids further description, and I commend it to the profession in the belief that it will meet the purpose for which it was designed.

As indicated in the drawing, Meyrowitz Bros., of this city, have made all of these curettes now in use.

121 WEST 125TH STREET.

THE GAIT OF NERVOUS PEOPLE.—MM. Gilles de la Tourette and A. Loude, in order to determine the difference between the manner of walking characteristic of healthy people and that of those suffering from nervous diseases, have adopted the following method: A large sheet of wall-paper is laid on the floor, and a longitudinal line is marked in the middle. The feet of the person experimented on are rubbed with rouge. After the necessary calculations the impressions are reduced in size and photographed. Before studying locomotion in its pathological aspect, the experimenters ascertained the character of progression in a normal state. In each case the length of the foot was taken, and the impression left by it. The width between the feet during the act of walking was also taken; the measurement of the angle formed by the opening of the feet, and its relation to the axial line, traced on the paper. The following conclusions were drawn from the study of patients with bilateral and unilateral lesions, from the onset of the affection until the end: The pathological step is more regular than that of a subject in a normal condition, both in length and the lateral separation of the feet; also the angle formed by the opening out of the feet.—*British Medical Journal.*

Army and Navy News.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from November 29, 1885, to December 5, 1885.

VICKERY, R. S., Major and Surgeon. Relieved from the assignment as Acting Medical Director, Department of Colorado, to date the 16th inst. S. O. 200, Department of Colorado, November 23, 1885.

Official List of Changes in the Medical Corps of the United States Navy for the week ending December 5, 1885.

AULICK, HAMPTON, Surgeon. Ordered to Alliance as relief of Surgeon G. P. Bradley.

BRADLEY, GEO. P., Surgeon. Ordered to Naval Hospital, Philadelphia.

SHAFER, JOSEPH, Assistant Surgeon. Detached from Naval Hospital, Philadelphia, and ordered to the Minnesota.

GAINES, J. H., Passed Assistant Surgeon. Detached from Naval Hospital, Washington, and ordered to the Dolphin.

Medical Items.

CONTAGIOUS DISEASES—WEEKLY STATEMENT.—Report of cases and deaths from contagious diseases reported to the Sanitary Bureau, Health Department, for the week ending December 5, 1885:

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-spinal Meningitis.	Measles.	Diphtheria.	Small-pox.	Yellow Fever.
Cases.								
December 5, 1885	0	16	31	4	6	95	11	0
Deaths.								
December 5, 1885	0	7	9	4	1	38	2	0

GONORRHŒA IN THE YOUNG.—Dr. B. H. Phelps, of Corry, Pa., sends us the following item: "In the issue of THE MEDICAL RECORD of November 14th is an article on 'Gonorrhœa in the Young.' I was not aware that such cases were so unique. I had three such cases this fall in one family, the patients ranging from between three and four to between five and six years of age. The two older were girls, the younger a boy. The little boy and one of the girls were brother and sister; the other little girl was a cousin visiting in the family. The sister was the first attacked, and I cautioned the mother about letting the other children play and sleep with the diseased child, but the precautions were not carried out. I directed the mother to question the little girl, and learn, if she could, the source of the disease. This she told me she did, and satisfied herself where it came from, but she did not tell me."

REGARDING FRESH PAINT AS AN ABORTIVE AGENT.—Dr. James L. Gardner, of Voluntown, Conn., sends the following: "I notice that several of your correspondents are inquiring regarding the above matter. I am a strong believer in the affirmative, *i.e.*, that fresh paint, mixed with spirits or the oil of turpentine, will cause a pregnant woman, if the odor is inhaled, to abort. In January, 1883, I was called to see E. G——, aged thirty-eight, married, in New London, and an honest, intelligent lady. She had miscarried shortly before at four months. Had borne two living children; no other miscarriages. Dr. N—— had seen her at the time of her abortion, and, after administering to her needs, left, assuring her 'she would be all right.' I found the patient had been 'painting a

little, just to suit her fancy, with 'turpentine paint,' and no other cause could be ascribed for her aborting. She had ovaritis, pelvic peritonitis, and a great amount of pain in the uterus and along the right Fallopian tube. The uterus remained enlarged, although the fœtal contents were discharged, and there was a state of great inertia of the organ. I preseribed opiates, tincture of iodine externally, and hot carbolized vaginal douches twice daily, with an occasional aperient to move the bowels. The case recovered after a protracted siege of several months. The second case I refer to is of Mrs. G. H——, aged twenty-eight, married, but living alone. She became pregnant, and at about two months took, as she informed me, a good dose of oil of terebinth. I found the uterus in a state of inertia, considerably inflamed and swollen, with some pelvic peritonitis. It resulted favorably, but took nearly double the time of 'spontaneous' abortion. I consider the poisonous element in new paint to be *the turpentine it contains*. Should like very much to hear further on this subject from the profession. Old women are full of 'traditions' relating to this subject."

Thomas Latham, of this city, also writes on the same subject: "Respecting 'Fresh Paint and Abortion,' in your last 'Medical Items,' a little reflection upon the chemical nature of paint will perhaps elucidate the question. The odor which we commonly know as that of fresh paint is that due to the volatilizing oil of turpentine contained in the paint, and in some degree to the boiled linseed oil. I think Dr. Eliot in error when he speaks of 'colica pictonum' produced by this. Painters never suffer from the 'fresh paint,' but from direct absorption of lead, from getting it upon the skin, underneath the finger-nails, etc., and also directly into the stomach by eating their lunches with unwashed hands. Their 'colica pictonum,' I take it, is Nature's effort to get rid of intestinal obstruction due to cessation of peristaltic action. I need not remind medical gentlemen of the well-known abortefacient powers of the volatile oils. Many women are also aware of them. Oleum juniperis sabinæ is the favorite, and is frequently demanded in drug-stores. May it not be reasonable to infer that the inhalation of the vapors of these volatile oils has the same effect as taking them into the stomach. I last week produced an excellent 'fresh-paint' odor by making a decoction of the fresh tops of Thuja occidentalis, sent from Canada by a friend to a rheumatic customer."

Abnormal Mobility of the Tongue, with Ability to Project it into the Naso-Pharynx.—Dr. Phelps, of Corry, Pa., writes: "A man who lives about a mile from this city, who is about forty-five years of age, came to me about one year ago for the removal of a polypus from the nose. I saw him several times pass his tongue into the naso-pharynx with perfect ease. The tongue is slightly pointed, and the frænum linguæ is apparently absent for some distance under the tongue. There is nothing abnormal in the formation of his mouth. He says he has possessed this ability for twenty years."

Arrest of a Threatened Abortion.—Dr. R. C. MacDonald, of Chelsea, Mass., writes that in the summer of 1884 he was called upon to treat a lady for prolapse and anteversion of the uterus. Under suitable treatment the trouble was nearly removed. He was called again to see her in December, on account of a profuse hemorrhage. Although the patient had not nursed her last child since May, she had not menstruated, and as this was about her time Dr. MacDonald supposed at first that the menses had returned. But on examination he found the os open and an ovum so low down that it could be grasped by the two fingers. He inserted a light tampon of cotton wool, gave opium, and ordered absolute rest. He writes: "To my surprise the hemorrhage ceased in a short time and the ovum was retained. I watched the case with interest. The patient went on from that time with all the usual signs of pregnancy to full term, and, on the 10th of July, 1885, I delivered her of a healthy full-sized boy, who was, I feel certain, the very ovum I had held between my fingers."

A Fine Opening for Young Physicians.—It is stated that there are but five physicians in Belgrade at the present time, all the others having been sent off with the Servian army. Of these five one does not practise, and another is the court physician and does not attend ordinary mortals, so that the available force is reduced to three. The population of Belgrade is in the neighborhood of 30,000. There will hardly be a very extensive emigration from this country to Servia, however, for the language is one of the most difficult to learn in all Europe; but one would suppose that Vienna would gladly unload some of her surplus doctors on the Serbs. Physicians are also wanted for the Servian army. The pay averages about $650 per annum.

Vaccination.—Dr. Samuel W. Francis says that the only thing to fear from excessive vaccination with bovine virus is Cattlepsy!

Adjustable Forceps.—Dr. Henri Haman has devised a form of obstetrical forceps in which the extremity of the spoon is provided with a double joint, so that the bars may be approximated, thus reducing very considerably the width of the blades. After the instrument is introduced and the blades locked the bars may be separated by means of an attachment in the handle so as to restore the spoons to their usual shape. When closed the blades are but a little over an inch in thickness at their widest part.

"Yellow Fever and the Efficacy of Quarantine."—Dr. A. N. Bell, editor of *The Sanitarian*, writes: "Under this title, in The Record for November 21st, Dr. S. T. Armstrong sends you an excerpt from *The Sanitarian* for September last, with remarks wrongfully attributing to me an animus toward the Marine Hospital Service. I have no animus whatever against it or any one belonging to it, and it is both a subject of surprise and regret to me that any one, in either private or public life, but especially in the latter, should ever construe my remarks and criticisms upon subjects and practices which appear to me to be in conflict with health as having any other personal bearings than personal and public health. In the particular case referred to by Dr. Armstrong he attributes my remarks, when applied to the quarantine under the auspices of the Marine Hospital Service, as compared with remarks previously made when I was ignorant of the fact that the subject at issue had any relation whatever to the Marine Hospital Service, to an unfriendly bias. The case was, briefly: When I supposed the health officer of the Port of New York wholly responsible for admitting the infected vessel to *pratique* without disinfection, I pointedly inquired, 'Why, in the interest of life, the public health, and of commerce was not the ship disinfected within twenty-four hours from the time of her arrival, . . . instead of being detained nine days and then sent on her way *via* New York bearing disease and death?' To this animadversion on his service Health Officer Smith took exception, addressing me a note which I published in *The Sanitarian* for September, stating that the vessel in question arrived at the New York Quarantine with a *clean* bill of health from Dr. Wm. P. Orr, the quarantine officer of the Marine Hospital Service at the Delaware Breakwater, with written addition—'This bark, John Gibson, has been cleaned and fumigated.' My published remarks, after receiving this note, were, in part, as quoted by Dr. Armstrong, and in addition, 'It has at least demonstrated to the Health Officer of New York that such cleansing and fumigation should not again pass his scrutiny.' My opinion of the utter worthlessness—ay, more—the danger to the public of all such service is so well and so long known by frequent repetition as to leave no room whatever for any one to construe it as personal.

The fault of Dr. Smith, as apparently recognized by himself, according to his note, was that he accepted the averment of Dr. Orr, that the vessel was *clean*. He did not take the same exception to such authority as he has learned the necessity of taking to 'clean' bills of health from abroad, and the result was as stated. But to the worthlessness of the kind of service rendered at the Delaware Breakwater, Dr. Armstrong furnishes additional evidence, for he states that, notwithstanding 'Health Officer Smith decided it would be safe to honor the bill of health, he took the precaution to fumigate the vessel again.' If, in the light of such evidence of their utter worthlessness and danger, such mere perfunctory 'fumigations' as those practised in the case of the John Gibson, no matter by whom, are persisted in, instead of disinfection and cleansing, it is sincerely to be hoped that the time is not far distant when those who practise them will be indicted for criminal incompetency."

Quinine in High Altitudes.—Dr. S. D. Bowker, of Kansas City, Mo., writes: "In a recent number of The Medical Record, Dr. Ralph M. Cole, of Idaho Springs, Col., in a report of a case in which quinine was used, says, 'it is necessary to observe great care in the use of this drug in high altitudes.' For the benefit of parties with a short experience in high altitudes I will say, that ten years in Colorado, four of which were spent in Central City, only four miles from Idaho Springs, taught me that Dr. Cole's conclusions will not do as a guide to practice. I went there in 1871 with a similar impression to his, without knowing just how I got the information. What was called 'mountain fever' was then raging with a heavy death-rate, and I found to my regret that small doses of quinine would not meet the emergency. I was informed by Dr. L. C. Tolles, who has practised in Central City nearly twenty-five years, that his first years there were spent under the false impression of Dr. Cole. He somehow got the notion that high altitudes contra-indicated the use of quinine, so that he almost discarded it, even in small doses. But, greatly to the benefit of his patients, he discovered that no climate in this country would tolerate, and even demand, as large doses as the high altitudes of Colorado. Ten grains every four or six hours, in a typical case of mountain fever, was not unusual in my practice, and Dr. D. W. King, who was in practice there, tells me he often gave a full ounce during twenty-four hours with the best results. Of course, this was in extreme cases, but, taken with facts known to the older men in practice in the mountains, proves that quinine is generally required in large doses in high altitudes, in any disease accompanied with fever, not only for its anti-periodic effect, but for its sedative action, so often needed to control nervous excitability caused by the unusual electrical conditions in all high altitudes."

Maggots in the Head.—Dr. R. H. White, of Angel Island, Cal., writes that he has found sulphate of quinine a most reliable agent for the expulsion of larvæ from the nasal and other sinuses of the head. Prompt relief to the patient was obtained by the exhibition of quinine in five-grain doses. The writer does not state whether the drug was also used externally in solution.

Giving Urine to a New-born Child and What Came of It.—Dr. E. J. Brown, of Minneapolis, Minn., communicates the following: "In the 'Dutch Account of Hottentot Pathology,' published in The Record of September 5th, mention is made of the custom among midwives of giving the new-born child some of its father's freshly drawn urine. Probably most practitioners are aware that this barbarity still prevails to some extent in parts of our own country. In this connection my father, Dr. I. Brown, recalls a reminiscence which he permits me to send you. Some thirty years since, he had under his care a brother physician who was a slave to the morphine habit. This gentleman related that a few years previous his wife had delighted him with the present of a son (his other offspring being all girls). The old women present demanded some of the father's urine for the babe. The demand was complied with, the infant was dosed, and was soon dead from morphia. The moral is obvious."

To Secure Primary Union after Amputation of the Breast.—In women who have much subcutaneous adipose tissue, Dr. B. Riedel advises the removal of the fat before closing the wound. The presence of much adipose tissue, he says, interferes seriously with union by first intention.

An Instrument for Measuring Albumin.—Esbach has devised an apparatus for the quantitative determination of albumin in the urine, which he calls an albumimeter. It consists of a small graduated tube, which is filled up to a certain mark with urine, to which is added a definite quantity of a solution of 10 grammes of picric acid and 20 grammes of citric acid in a litre of water. The test-tube is then closed with a rubber stopper, shaken so as to cause a thorough admixture of the two fluids, and left to stand for twenty-four hours. The amount of precipitated albumin is then read off from the scale, which is graduated so as to indicate the amount of albumin expressed in grammes contained in a litre of urine.

Tweedledum and Tweedledee.—One of the prominent out-of-town delegates to the meeting of Old Code adherents, recently held in this city, was heard to remark that he didn't observe any great difference between Old and New Code men as to their readiness to consult with the "-paths." He himself could not see any reason why a general practitioner should not consult with an irregular if specialists were allowed to do so; and if he were in a tight place he would rather seek the advice of a well-educated homœopath than of an ignorant member of the regular profession. Where is the consistency in fighting for principles on theory if they are not adhered to in practice?

The End of the Cholera—On October 18th a *Te Deum* was sung in the Cathedral of Valencia in thanksgiving that the cholera had subsided and that the city was entirely free from the disease. It was at first proposed to have a public festival as well, but better counsels prevailed, as it was deemed inappropriate to make merry while so many were mourning their losses, and accordingly the religious function was the only official sign of the termination of the epidemic.

Somewhat Behind the Times.—It is reported that Professor Cheine has decided to discontinue the use of the carbolic spray in the wards of the Edinburgh Royal Infirmary for six months, in order to test whether it has any real merit. He will be somewhat consoled to know that the spray has long since been discarded by most of the leading hospital surgeons in the metropolis.—*London Hospital Gazette.*

A Religious Medical Journal.—Once every year, within the octave of the feast of Sts. Cosmas and Damian, *El Sentido Católico en las Ciencias Médicas*, which, by the way, is one of the best of our Spanish exchanges, displays upon its first page the following invocation: "To the holy patrons of the medico-pharmaceutical profession, Cosmas and Damian, the editorship of the journal 'Catholic Thought in the Medical Sciences' renders its homage, and invokes their powerful intercession to obtain from the Giver of all health the necessary light to defend the doctrine of harmony between revelation and science."

To Increase the Adhesive Properties of Plaster.—Dr. H. R. Kelly, of Galion, O., writes that a sponge, saturated with stronger ether, passed lightly over the surface of adhesive plaster, will cause it to stick firmly to the skin. No heat is necessary, and the plaster will adhere closely over its whole extent. Spirits of turpentine will act in the same way.

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Original Articles.

THE TREATMENT OF FRACTURES OF THE UPPER EXTREMITIES.[1]

BY SAMUEL W. SMITH, M.D.,

NEW YORK.

IN presenting my paper, entitled "Original Deductions, based on a Study of One Hundred Cases of Fractures of the Upper Extremities, excluding the Hand," I claim no originality in my general plan of treatment of these cases except in the use of splints which I have invented, and which have, to my knowledge, never been used before. If, in the history of each case coming under my care during the past four years, I present any idea that may hereafter prove a new and substantial benefit to even one unfortunate laborer by shortening the term of enforced idleness resulting from accidental injury, and by bringing him or her out of such term with a useful instead of a crippled arm or joint, I shall consider my time well spent in reviewing my experiences in this line.

That fractures of the upper extremities are very common among children, as well as among older persons, is shown by the following tabulated list:

	6 years and under.	6 to 12 years.	12 to 50 years.	Over 50 years.	Total.
Scapula (3)—Acromion	.....	.....	2	.....	2
Coracoid process	.....	.....	.....	1	1
Clavicle (37)	20	5	8	4	37
Humerus (15)—Surgical neck	.....	1	.....	.....	1
Shaft of	2	.....	.....	1	3
Condyles: T-fractures	.....	1	1	.....	2
Internal condyle	1	2	.....	.....	3
External condyle	1	2	1	.....	4
Epicondyle	.....	1	1	.....	2
Ulna (11)—Olecranon	.....	.....	3	.....	3
Shaft	.....	.....	1	1	2
Head of	.....	.....	4	.....	4
Styloid process	.....	.....	.....	2	2
Radius (34)—Neck of	.....	1	.....	.....	1
Shaft of	4	.....	2	.....	6
Lower end of: Transverse or short oblique	1	.....	9	2	12
Lower end of: Colles'	.....	.....	3	12	15
Total	29	13	35	23	100

Hence it becomes us as surgeons to employ our art in assisting nature's physiological laws of repair by placing the fragments in such a position as will most likely result in a complete union without deformity, and that such a position shall allow as much ease and comfort to the sufferer as possible. This has been my constant desire and aim, both in dispensary and private practice. The above table shows that nearly half of these fractures occurred to children under twelve years of age. Of these, twenty-five were fractures of the clavicle; eight were fractures of the condyles of the humerus, and but one a fracture of the lower end of the radius. In the cases over twelve years of age we have an altogether different state of affairs. But twelve were fractures of the clavicle, three fractures of the condyles of the humerus, and twenty-four fractures of the lower end of the radius. It seems to me important to give a minute description of the kind of fracture as well as of the location, otherwise, in recommending any particular splint or plan of treatment, we may easily mislead the more inexperienced of our profession and thus have a valuable aid in the treatment of those injuries deemed unworthy of a second trial; and therefor it is that I ask your indulgence while I refer to some of the peculiar characteristics of the more important fractures.

Fractures of the clavicle.—Of the twenty-five fractures of the clavicle of children under twelve years of age, twenty-two were transverse or short oblique, having the line of fracture near the outer edge of the middle third, with only slight displacement of the fragments. In some, there being no displacement, the periosteum evidently not having been torn through, the only evidence of fracture was a false point of motion and crepitus; while in the other three cases the fractures were near the middle of the bone, and long oblique in character, with considerable displacement and deformity. Of the eight fractures of persons between twelve and fifty years of age, three resulted from great violence to the upper and outer portion of the shoulder, the line of obliquity commencing near the inner edge of the middle third and running from above downward and inward, developing great displacement of the fragments with much deformity; the outer fragment being drawn downward and inward, so that it lay under and crossed the inner fragment like the letter x. [I think, when this particular kind of obliquity occurs, it is due to the clavicle being forced down across the first rib.] The other five fractures resulted either from a fall on the hand with the arm extended from the side, or a fall on the outer portion of the shoulder. Of these, three were long oblique, the line of obliquity running from the outer portion of the middle third backward and inward, having much less deformity and displacement than obtained in the three cases before mentioned. One was transverse or short oblique near the outer edge of the middle third, with very little deformity, the other being transverse outside the coraco-clavicular ligament, with considerable displacement and dropping of the shoulder. The remaining four cases of persons over fifty years of age, resulted from a fall on the hand while the arm was extended from the side, or from a fall on the outer portion of the shoulder; all were in the middle third, running obliquely backward and inward. In all of these cases, just as the fractures occurred within the attachment of the subclavius muscle, it became alike difficult to overcome its tendency to draw the outer fragment inward and forward.

Fractures of the humerus.—At present I will speak only of those at the lower end of this bone. In speaking of these fractures, please understand me as referring to the condyles or separation of the epiphysis. That such are not infrequent, especially between the ages of six and twelve, is shown by the above table. Of eleven fractures of the condyles of the humerus two occurred in children under six years of age, one of the external and one of the internal condyle; six occurred between the ages of six and twelve; of these one was of the epicondyle, two of the external condyle, two of the internal condyle, and one of both condyles, or the so-called T-fracture. Three occurred in persons between the ages of twelve and fifty years; of these, one was of the epicondyle, one of the external condyle, and one of both condyles, or the so-called T-fracture.

[1] Read before the New York Academy of Medicine, December 3, 1885.]

Fractures of the lower end of the radius.—I will not occupy your time in reviewing the more simple fractures of the ulna and shaft of the radius, but will confine my remarks to the fracture of the lower end of the radius—the so-called "Colles fracture." And here a word explanatory of my understanding of a "Colles fracture," for I concede a marked difference between a "Colles fracture" and a transverse or short oblique fracture, which latter has not, under my observation, given rise to the characteristic deformity so particularly described by Mr. Colles, except when we have the fracture transverse through the more cancillated structure of the bone, with the lower fragment splintered and impaction of the upper fragment. All the text-books on surgery which I have consulted omit mention of the peculiar obliquity of this fracture. Mr. Colles' own description in the *Edinburgh Medical and Surgical Journal*, vol. x., p. 182, 1814, deals more particularly with its characteristic deformity and cause, without referring to the degree of obliquity. Prof. Alexander Gardner, of Queen's College, Belfast, in his treatise on "Fractures of the Lower End of the Radius and Clavicle," in 1875, says: "In justice to the man who first described this fracture, we should restrict ourselves to the form or variety which Mr. Colles described." He then asks, "Is the fracture transverse?" and says, "Of twenty-seven specimens examined, nineteen were oblique from before backward, and eight directly transverse," and again asks, "If the transverse fractures had been examined immediately after the accident, would they have been considered directly transverse?"

Erichsen, in his work on Surgery, vol. i., p. 420, says: "Colles' fracture is generally oblique from before backward;" and again, page 421, that a patient died in the hospital twelve days after receiving a "Colles fracture," the wrist presenting the characteristic deformity in a marked degree; and that he made a dissection of the limb and found the line of fracture transverse and about an inch above the articular surface, with impaction of the upper fragment, the lower fragment being somewhat comminuted.

Prof. E. M. Moore, of Rochester, in his very able paper read before the New York State Medical Society, and published in THE MEDICAL RECORD, vol. xvii., p. 305, 1880, says "the fracture is usually oblique." But he fails to describe the special character of the obliquity, and recommends the following treatment, viz.: A small roller or compress under the ulna, and over this and around the wrist, tightly drawn, a few turns of adhesive plaster, about two inches wide, and says that the best results are obtained thereby. This may be so in Dr. Moore's hands, but it utterly failed in mine, except in cases of the short oblique or transverse fracture, without impaction, when I obtained as good results as with any other splint. It was during a trial of Dr. Moore's splint in the treatment of these fractures that I recognized a marked distinction between long obliquity and short or transverse fracture. However, when we have a short oblique or transvere fracture within an inch of the carpal articulation, and a comminution of the lower fragment with impaction, then we have a shortening of the radius, the carpal end of the lower fragment with the carpal bones being drawn backward, the hand also drawn outward and presenting the characteristic deformity described by Mr. Colles. The kind of splint used and the after-management of the case should, therefore, depend largely upon the fact whether the obliquity of the fracture be long or short; and for this reason we have the action of the supinator longus with the extensors constantly drawing the lower fragment upward, and its carpal end with the carpal bones backward and the hand outward, which gives rise to the posterior deformity and appearance of dislocation of the ulna. Hence, as the obliquity is great, the difficulty of retaining the fragments in apposition after reduction is correspondingly great, and, by the drawing upward of the lower fragment, we have a shortening of the radius giving rise to the unnatural convexity over the head of the ulna so common after treatment of these fractures. Dr. Moore, however, claims that the inner deformity over the head of the ulna is due to the giving way of the internal lateral ligament and the triangular fibro-cartilage, the styloid process and sometimes the head of the ulna being thrust through the annular ligament. This may or may not be the case, and is difficult of demonstration. Through the kindness of Dr. Dennis, I was shown a remarkable specimen of so-called Colles' fracture, with dislocation of the ulna, the head of the bone tearing through the annular ligament. This specimen was taken from a woman who had thrown herself head foremost from a third-story window, striking upon her hands. The force of the blow was greater than is necessary to produce a Colles fracture, hence the driving of the head of the ulna through the annular ligament and the comminution of the lower fragment of the radius.

In speaking of these fractures I will use the term Colles' fracture only where the fracture was of the long oblique variety, and gave rise to the characteristic deformity as described by Mr. Colles, and use the words short oblique or transverse where the fracture occurred in the same location, with the deformity less marked, and after the fragments had been brought into apposition, were easily held in their natural position.

There are in my list twenty-five fractures of the lower end of the radius. Of these, two occurred to children under twelve years of age, one of which was transverse, and one a separation of the epiphysis with no deformity. Eleven cases were between the ages of twelve and fifty years. Of these, eight were short oblique or transverse with some deformity, and three were Colles' fractures, deformity well marked. Twelve occurred to patients over fifty years of age, and of these two were short oblique or transverse, with considerable of the characteristic deformity of Colles' fracture, but easily reduced and readily held in position. The remaining ten were Colles' fractures, the characteristic deformity being well marked in all of them.

Treatment.—I will not occupy your time in reviewing the various splints and devices for the treatment of these fractures. Professor F. H. Hamilton, in his treatise on "Fractures and Dislocations," page 194, says of the number of splints and devices for the treatment of the fractured clavicle: "A catalogue of the names only of the men who have upon this simple point exercised their ingenuity, would be formidable, nor would it present any mean array of talents and of practical skill." As much may be said relative to the number of splints and devices for the treatment of fractures of the condyles of the humerus and the lower end of the radius.

The main object to be obtained in the treatment of fracture of the clavicle is to lift the shoulder upward, outward, and backward, and to hold the fragments in apposition. The two splints most commonly used for this fracture are, on the Continent, Desault's, with the axillary wedge, and in this country Professor L. A. Sayre's adhesive plaster splint, and, to some extent, Professor E. M. Moore's shawl or elbow figure-of-eight splint. With these I will briefly compare my splint for fractured clavicle. In the use of Desault's splint for oblique fracture near the inner third of the clavicle, I have never been able to throw the shoulder sufficiently outward to overcome the deformity without seriously interfering with the circulation of the arm, though the forearm, from the fingers to the elbow, be bandaged. Cases are reported where paralysis was caused by the pressure of the wedge upon the brachial plexus. Professor Sayre's splint, properly applied, will overcome any of the ordinary results of an oblique fracture in the middle third, where the obliquity is from before backward; but where the bone is fractured in the great convexity and the obliquity is downward and inward, I have found it insufficient to overcome the deformity, and have also found it to interfere with the circulation of the arm. Its greatest objection, however, is the irritation of the skin by the

adhesive plaster, which in some cases, especially those of young children, excoriates and results in superficial ulceration to such a degree, that several times I have felt obliged to remove the splint in less than a week from its application.

Professor Moore's figure-of-eight splint was an advanced step, and answered the purpose only where the fracture

FIG. 1.

was near the outer edge of the middle third, and transverse or short oblique in character; but where the fracture is near the inner third and long oblique it does not answer its intended purpose, but does the very opposite, for, passing the end of the shawl backward over the shoulder, it presses the outer fragment downward, rather than hold it up in apposition with the inner fragment. Nor does it suffice to draw the elbow backward and inward enough to overcome the action of the subclavius muscle, which, in my opinion, is one of the main factors in drawing the outer fragment inward. This led me to carry Dr. Moore's idea a step farther, by making a clove hitch with a scarf around the forearm well up to the bend of the elbow, passing the loose ends across the back and over the uninjured shoulder. This enabled me to draw the elbow of the injured side farther backward, inward, and upward, and make the humerus a lever and the side of the chest a fulcrum by which I could lift the shoulder of the injured side upward, throw it out, and draw it backward. I then could completely overcome the action of the subclavius and other muscles of the shoulder, and also that of the sterno-cleido-mastoid by tension upon the pectoralis major, fixing the scapula and firmly holding the fragments in apposition without at any time interfering with local circulation. This is what is desired from any splint for this fracture.

CASE II.—*Transverse or short oblique fracture of the clavicle, near the outer edge of middle third.*—Kate B——, aged eighteen months, on December 10, 1879, was sent to me from the eye class by Dr. Carey, of the Demilt Dispensary. She was suffering from fracture of the clavicle. The patient had fallen from the bed and struck upon the left shoulder. She cried somewhat, but as she had at the time a deep ulcer from vaccination upon the arm of the injured shoulder, the mother had thought nothing of the accident until she had noticed a black and blue spot over the clavicle. On examination I discovered a transverse or short oblique fracture near the outer third of the clavicle, upon the same side of the body as the ulcer from vaccination. To apply either the Sayre adhesive plaster splint or the axillary wedge splint was out of the question. Hence, as was suggested to me by the article of Dr. Moore, of Rochester, in relation to the use of a shawl for holding up the shoulder, I improvised a splint. I used a scarf of unbleached cotton, six inches wide by four yards long, and made a clove hitch around the forearm, near the elbow, which was well padded. I was enabled, by drawing the elbow backward, upward, and inward, to throw the shoulder outward and upward, and draw it backward. I passed the two ends of the scarf around the uninjured shoulder and fastened it with a safety pin, bringing the loose ends across the uninjured side of the shoulder, to form a hand-sling. I was thus enabled to completely readjust the fracture and keep the broken fragments in apposition. The patient wore the splint for three weeks without complaint or any evidence of injury to the arm. At the end of that time I removed it, and found the fragments firmly united, without deformity.

In some of the following cases I used Sayre's splint, in others my own. The results in every case of using my splint, whether for oblique or transverse fracture, were equally as good as where Professor Sayre's splint was used, and with no discomfort from confining the forearm across the chest, and without the excoriation and superficial ulceration so apt to follow the use of the adhesive plaster splint, to say nothing of its want of cleanliness and danger of slipping due to the perspiration.

After a fair trial of my scarf splint on the more severe fractures of the clavicle, where the obliquity was downward and inward through the great convexity of the bone, I abandoned all other splints and confined myself to the use of my scarf splint, until I had made one more satisfactory in obtaining a fixation of the fragments with the elbow in the same position.

FIG. 2.

It is for this fracture, oblique, downward, and inward, and through the great convexity of the bone, that I claim for my new splint for fracture of the clavicle all the advantages of any other, as well as some advantages that no other splints have.

This splint is very simple, easily made, and not expensive. It is a padded gauntlet-shaped piece of leather, laced to fit the forearm, running on either side back of the

bend of the elbow. To this part is attached a strap and buckle. A padded collar with strap, buckle, and ring is fitted to the uninjured shoulder. Through this ring the strap from the elbow piece passes, and by tightly drawing this strap the arm of the injured shoulder is under sufficient control to bring the fragments into perfect apposition. A sling is made to pass from the ring of the collar on the uninjured side of the neck for the hand of the injured side.

CASE LIX.—*Long oblique fracture of middle third of clavicle; treated by backward position of elbow, and cured without deformity.*—John M——, aged seven years, in April, 1884, was brought to the dispensary by his mother, who informed me that her little boy, while climbing over a fence the day before, fell eight or ten feet headlong to the ground. Since then he had been unable to use his left arm. It hung like a dead weight hy his side, the shoulder having dropped downward, forward, and inward to a very remarkable degree. The arm rotated, as it were, around in front of the chest. Examination showed a long oblique fracture near the inner edge of the middle third of clavicle, the obliquity running from above downward, inward, and backward. The patient was thin in flesh, and the line of obliquity was readily mapped out. The application of my scarf bandage splint did not seem quite satisfactory for holding the fragments in perfect apposition, as the adjustment is not so easily made as with my gauntlet and collar splint. By the application of this splint the broken fragments were held in apposition for three weeks, when I removed the splint. I found the broken bone firmly united, without any deformity or perceptible shortening of the clavicle.

CASE LXXXIII.—*Long oblique fracture of clavicle at inner edge of the middle third; obliquity running from above downward and inward.*—John F——, aged thirty-nine years, in January, 1884, came to the dispensary for advice in relation to a fracture of his right collar-bone, received three or four days before. He informed me that, while at work in a lumber yard, he and another workman were carrying a long, heavy piece of lumber; that the other man, who was in front of him, fell, dropping his end to the ground. The force of the plank's fall was communicated to Mr. F.'s shoulder, upon which rested the other end of the plank. The arm of the injured shoulder dropped by his side, and his end of the plank fell to the ground. Two days after he went to a college clinic, where a Sayre adhesive plaster splint was applied, and over this was placed a Velpeau bandage. When he presented himself at the dispensary he also complained of numbness in his hand and arm, as well as pain. I removed the bandage and found the splint in proper position for fracture of the clavicle. On examining the injury I found it to be a long, oblique fracture of the middle of the clavicle, the obliquity running from above downward and inward. The fragments were over-riding each other, and their long axes crossing like the letter X. They presented sharp points to the skin at two different places, so that the fragments were far from being apposed in their natural position. I removed the Sayre splint and applied my splint, drawing the elbow backward and inward, as in Case LIX. With the elbow in this position I was able to entirely overcome the deformity of the fragments, bringing them into apposition and holding them there. At the end of three weeks firm union had taken place. The splint was worn for a week longer, and I removed it and discharged the patient cured, with little or no deformity.

CASE C.—*Long oblique fracture of the middle of the clavicle cured without deformity.*—Jesse F——, aged ten years, was brought to the Demilt Dispensary in September, 1885, by his mother, for treatment of an injury to the right shoulder. The patient informed me that while playing on the sidewalk, the day before, a boy pushed him down, the outer edge of his shoulder striking against a stone step, since which time he was unable to use his arm. The arm hung helpless by his side with the hand and forearm in a state of pronation in front, the shoulder considerably lower, and a shortening of the clavicular line as compared with the uninjured side. Examination showed that the injury sustained was that of a long oblique fracture near the inner edge of the middle third of the clavicle. The second day following the injury I applied my splint for fracture of the clavicle. With it I was enabled to bring the fragments in apposition and hold them firmly until consolidation took place. The splint was worn with little or no discomfort for three weeks. The result, a cure without deformity.

Fractures of the condyles of the humerus.—It is admitted that injury to, or fracture of, the elbow is a serious matter, and the result thereof is largely dependent upon appropriate local treatment and care. But when the line of fracture of either condyle of the humerus runs into the joint it is doubly serious, and has thoroughly tested the ingenuity and skill of our profession, not a few of whom have been prosecuted because of a resultant stiffened joint or the so-called gunstock deformity remaining after treatment was discontinued. This fracture is generally caused by direct violence with much injury to the soft parts; hence, it is of special importance in treating it to use means that will most effectually promote the absorption of the resulting inflammatory products in and around the joint, as well as the speedy coaptation of the fragments and the holding of them firmly in apposition.

My experience in treating injuries of the elbow-joint, whether fracture obtained or not, has taught me that prompt and vigorous treatment, to combat local inflammation with effusion in and around the joint, and appropriate treatment for its reabsorption, is our only safety from false anchylosis or stiffened joint, so commonly resulting from these injuries, and so annoying to the surgeon as well as painful to the patient.

The splints generally used are the posterior, anterior, and the internal lateral angular, with or without movable joints, and each one is recommended by equally good authorities. Each has advantages and disadvantages, but, as Dr. Alis, of Philadelphia, states, none can be firmly enough applied to fix the joint without interfering with the perfect coaptation of the fragments; hence the loss of the so-called carrying point, besides the interference with local applications, which are so important in the early as well as the later treatment of these injuries.

Dr. Alis recommends semi-extension of the arm with a simple splint of flour paste or strips of adhesive plaster. Here, again, local treatment is obstructed, and I consider flour paste or adhesive plaster insufficient to hold the fragments in apposition, especially where the line of fracture is through the external condyle into the joint. At least it has proved so in my hands.

In fractures of the external condyle I have preferred the internal lateral splint, with the forearm in a state of semi-extension and the hand in a state of supination.

In cases of separation of the epiphysis I have given preference to the long anterior leather splint, extending from the shoulder to the hand and applied with the forearm in extension, then flexed to a right angle. With all of these fractures, and especially the so-called T-fracture, none of the splints in common use gave me entire satisfaction in preserving the lateral angle of the arm, so essential in retaining the carrying point and preventing the gunstock deformity—a deformity that seriously lessens the ability to use the limb for any work, especially carrying a weight by the side, to say nothing of the special distress the deformity causes to women.

CASE XII.—*Fracture of the external condyle of the humerus; treated with the internal lateral angular splint, resulting in loss of the "carrying point" with gunstock deformity.*—Geo. H——, aged twenty-three years, in June, 1880, came to the dispensary complaining of a painful injury to his right elbow. Two days before he had been knocked down by a rapidly moving express wagon. He thought the horse had stepped on his arm. Examination showed that much injury had

been done to the soft parts. Swelling was very great, and the skin was blackened from extravasation of blood on the outside of the lower end of humerus. The fragment of the condyle was drawn down, so that the lateral angle of the arm was reversed. By flexing the forearm and restoring the external lateral angle crepitation was readily obtained. The patient was confined to his bed for the next two days, and evaporating lotions, alternated with hot poultices, continually applied. It was impossible to keep the patient in bed longer, the swelling having greatly subsided. The natural contour of the arm was restored, and the broken fragments were nicely coaptated. The forearm was flexed to nearly a right angle, causing but little pain, and dressed with an internal lateral splint, with an opening for internal condyle. The patient was seen every second day at the dispensary for the next ten days, when the splint was removed and re-applied, and passive motion commenced on the tenth day. Although but little movement of the forearm could be made without causing severe pain, by the daily application of hot poultices to the elbow, at the end of four weeks from the first removal of the splint, sufficient extension of the forearm could be made to show that the external later angle of the arm, as well as the "carrying point," was lost. Patient continued to visit the dispensary, irregularly, for five or six months, but was never able to fully extend the forearm.

CASE XIII.—*Fracture of internal epicondyle; treated by position without a splint, and cured at the end of four weeks without any stiffness of the joint.*—John E——, aged fourteen years, in June, 1880, came to the dispensary for advice in relation to a severe injury he had received to his left elbow. He informed me that while leaving the school-room a few hours before, he was shoved by another boy and fell, striking his elbow against the edge of a stone step. Examination showed a swelling on the inside of the elbow-joint, with a slight abrasion under the epicondyle. By extension and supination of the forearm, with my fingers pressed against the condyle, crepitus was readily felt. A further examination showed that the epicondyle was broken off and slightly drawn downward; there was no other deformity, comparing the injured with the uninjured arm, and my diagnosis was a simple fracture of the epicondyle. I sent the patient home and had him confined to bed, the arm resting upon a pillow, flexed and pronated in the most comfortable position to him, and ordered cold applications to be kept to the elbow for forty-eight hours. On the third day following I called at the house of the patient, and although cold applications had been faithfully applied, I found the elbow and forearm enormously swollen, and a large spot over the internal condyle, red and hot to the touch. The patient complained of a good deal of pain whenever the arm was moved. Tongue furred; temperature in the axilla, 101.5 degrees. I prescribed a mild cathartic, to be followed by a few doses of liquor ammonia acetatis, and locally a lotion of lead and opium, over which hot poultices of flaxseed-meal to be changed every two hours. On the second day following I called to see the patient, and found him much improved. The swelling had noticeably subsided, and the redness had quite disappeared. I now ordered an evaporating lotion to be applied to the swollen joint, and alternated with hot poultices, the patient to be kept in bed.

This plan of treatment was followed up for ten days, when I commenced passive motion, moving the joint but little at first, and increasing the degree of flexion and extension each day, and continuing the local treatment as well, until, at the end of four weeks, I discharged the patient cured, with perfect use of the joint. There was no deformity, no swelling around the joint, and full extension and flexion existed without pain or stiffness of the joint.

CASE LVI.—*Fracture of lower end of humerus; treated with a long anterior leather splint.*—Edward G——, aged six years, was brought by his mother to the dispensary, in March, 1882, for advice. She informed me that while the children were out playing upon a pile of boards the day before, her little boy was thrown off, some boards falling upon him. He was carried into the house, and when his left arm was moved he cried out with pain. The arm, at the elbow, was very much swollen and black and blue to a considerable extent. It hung by the side, with the forearm extended, and midway between pronation and supination. There was very little pain, except when attempt was made to flex or rotate the forearm, and then it was very great. I put the little patient under ether, and carefully made an examination. On manipulation of the elbow, crepitus was readily obtained. The fracture was through both condyles, extending into the joint. The lower fragments were pulled backward; otherwise the position of the arm appeared normal. I had the little sufferer confined to bed,

FIG. 3.

with the arm resting upon a pillow, and treated with evaporating lotions, alternated with hot applications, for the next three days. Four days after the injury, the swelling having very much subsided, the fragments were more easily made out, confirming my former diagnosis. I now applied a long anterior leather splint, extending from the shoulder to the wrist, and held in place by adhesive plaster; then gently flexing the forearm, I was able to bring the broken fragments into natural position. A roller bandage was now applied over the splint from hand to shoulder. The splint was worn for four weeks, but was removed every three or four days to permit examination of the position of the broken fragments. At the end of three weeks passive motion was commenced. The splint was left off, permanently, at the end of four weeks. Passive motion continued daily until the end of two months, when I discharged the patient cured, with full extension and flexion of the forearm, but with some gunstock deformity, the external fragment having been pulled downward by the application of the roller bandage, holding the splint in place with the forearm flexed.

A varied experience, full of disappointments, in the use of the known splints for the more severe fractures of

the condyles, set me to work to make a splint with the following requisites:

1st. To hold the fragments in apposition.

2d. To allow the forearm to be flexed or extended, pronated or supinated, with fixation at any point.

3d. To lengthen or lessen the external lateral angle of the arm with fixation.

4th. To leave the entire elbow-joint exposed for local treatment, during the whole time of wearing the splint, without disturbing it.

The result of this work was a splint that my practice has proved to most happily meet every requisite mentioned.

FIG. 4,

CASE LXXI.—*T-fracture of both condyles of lower end of humerus; treated by my elbow splint, and cured without deformity and with perfect use of elbow-joint.*—William M——, aged eight years, in January, 1883, was brought to the dispensary by his mother. He was suffering intense pain from an injury to his right elbow-joint received the day before. His mother informed me that he had been knocked down by a horse and express wagon, falling forward on his face. The wheel of the wagon passed over his elbow. When I first saw the patient at the dispensary there was very much swelling about the joint, and the pain was so great that it was impossible to make out the extent of the injury without administering ether, which I did. The examination showed that both condyles were broken through into the joint, and could be moved upon themselves as well as upon the shaft of the humerus. The deformity was not great, except in the reversing of the outer lateral angle of the arm. The elbow was drawn somewhat backward, with the fragments tilted forward, resembling a partial dislocation of the forearm backward. I applied my elbow splint, bringing the arm into semi-extension and restoring the natural lateral angle of the arm, with the hand midway between pronation and supination. By passing a roller bandage around the rods of my splint and under the lower part of the arm and elbow, I was enabled to form a cradle for resting this part of the arm and for holding the fragments more firmly in position. I now sent the patient home and had him confined to bed with his arm resting upon a pillow. Made local applications of hot poultices, alternating with evaporating lotions. There was a considerable elevation of temperature, with coated tongue, etc. Gave a mild calomel and jalap purge, and ordered a milk diet. On the second day following I visited the patient at his home and found him in a much improved condition. The swelling around the elbow-joint had greatly subsided, and the pain was much lessened. I could now ascertain the extent of the injury, which confirmed my former diagnosis. The same treatment was continued for three or four days longer, when I commenced flexion of the forearm. At the end of ten days I flexed the forearm to nearly a right angle with the arm, not, however, without causing some pain. With the forearm flexed and midway between pronation and supination, I fixed my splint, which was held with a sling from the neck, and allowed the patient to leave the bed and take exercise out of doors. At the end of two weeks passive motion was commenced and kept up daily. The arm was held alternately by my splint at the fullest point of extension and of flexion, as seemed most adapted to overcome the stiffness of the joint. Thus the splint was of much value in preserving the natural contour of the arm, as well as in holding the forearm fixed at the farthest point gained in either flexion or extension, until I again saw the patient. At the end of two months I removed the splint altogether. The forearm could be flexed and extended to a degree almost equal with the uninjured arm. Hot poultices were applied to the elbow at intervals of two or three days during this period, and I consider their application a great factor in the restoration of the mobility of the injured joint. I saw the patient for the last time at the dispensary three months after the injury. He had the power of full extension and flexion of the forearm, with no loss of the so-called "carrying point," and with no "gun-stock" deformity.

My splint is made with two rods of untempered steel, extending from the upper part of the arm to the wrist, with a ball and socket joint at the elbow, and screws for fixation; the lower ends pass into a sheath-screw on either side of the wrist; the upper ends pass through two iron posts set in tin and made fast to the arm by plaster-of-Paris bandages, the rods being made firm in the posts by thumb-screws. On each side of the wrist is a post through which the sheath-screw passes, and made fast to the wrist in the same manner as the upper parts, and fastened with fixation-screws. By moving the sheath-screws the lateral angle of the arm may be contracted or widened as needed, thus overcoming any tendency to loss of the carrying point (or gunstock deformity). A turn of the fixation-screws at the elbow and wrist will allow the forearm to be flexed, extended, pronated, supinated, and fixed at any desired point without other interference with the splint.

PASSIVE MOTION.—Recognized authorities, of like high standing, differ materially as to the time when passive motion should be commenced.

While some advise commencing passive motion within a week of the injury, others say that under no circumstances should it be commenced before three to five weeks. My opinion is that passive motion should be commenced in each case according to the extent of injury to the soft parts, and our ability to hold in check and reduce the inflammation following the injury. Thus, while passive motion might be wisely commenced within a week of the injury in one case, in another it would be better surgery not to commence for three or four weeks.

COLLES' FRACTURE.—Not having as yet treated a sufficient number of Colles' fractures by my new extension splint to draw conclusions satisfactory to myself, I will leave the discussion of its application to these fractures for a future paper.

I will briefly say, however, that whether the fracture be transverse near the carpal articulation, with splintering of the lower fragment, or a long oblique higher up, the treatment is necessarily the same; that is, we make extension of the hand, drawing it well toward the ulnar side, and the deformity is reduced. The application of any splint in common use is to retain the fragments in their natural position by forcible compression, and the daily removal of the splint to renew extension if we would secure repair of the fracture without deformity. I have undertaken to do this by making the hand and forearm the points of resistance to overcome the natural tendency to a shortening of the radius, which tendency is, in my opinion, so powerful, so constant and vigorous in action, that it is the cause, more than any other, of the unsightly convexity over the head of the ulna. I cannot close this paper without protesting against allowing any splint whatever being kept without removal on a Colles fracture for two or three weeks at a time, or even three days. My plan has been to remove the dressing for examination of the injury every second day, until consolida-

tion of the fragments is obtained. To support this protest I will read you Case XCIX.

CASE XCIX. *"Colles' fracture;" treated by permanent splint; deformity and a crippled hand resulting therefrom.*—Mrs. G——, aged sixty-nine years, called at my office in October, 1884, to consult me in relation to a stiffness of her left hand and wrist accompanied by extreme pain. Patient gave me the following history: Three months previous, while descending the stairs, and when within three or four steps of the bottom, her heel caught on the edge of the step, throwing her forward to the floor. She fell on her left hand outstretched in front of her. A physician was called in to attend her within an hour after the injury. He said it was a "Colles' fracture," applied temporary dressing, and called the following day in company with a surgeon. After examining the fracture together a splint was applied, and left in position for two weeks, then removed and a plaster-of-Paris splint was put on, leaving it in position for six weeks longer. The result of this treatment, in this case, is a deformed wrist and crippled hand.

But, after all, this cast (cast shown) not only makes a stronger and more eloquent protest than can any words of mine, but also makes an appeal to every surgeon faithful to his human work.

OF THE LIABILITY OF PHYSICIANS FOR REPORTING, OR FAILING TO REPORT, TO THE BOARD OF HEALTH CASES OF INFECTIOUS OR CONTAGIOUS DISEASE.

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ALL liability of a physician, in legal contemplation, must arise from a breach of duty owing either to the patient, toward whom he stands in a private contractual relation, or to the general public, which requires certain offices at his hands. Where the duty is founded in contract no cause of action will accrue from its breach in favor of any one not in some way connected with the contractual relation. But if the breach be of a duty existing independently of contract, then any one injured by it may have his action for damages.

No physician is under compulsion to establish this private relation by accepting any particular person as his patient; but, having established it, he owes to that patient the duty of treating his case with ordinary skill, knowledge, and care, even though the services be rendered gratuitously. What ordinary skill and knowledge are in any particular case is a question of fact for the jury. The rule of law seems fairly settled that, generally speaking, by ordinary skill, etc., is to be understood that degree of professional attainment possessed by the average practitioner in such communities as that in which defendant practises. A specialist is held to greater skill in his specialty than a general practitioner would be, the degree of experience, the facilities for study, and the pretensions of the physician are all factors determining what in his case is ordinary skill.

The first rule governing the liability of a physician to his patient for negligence being that he is expected to exercise ordinary skill and knowledge in the case, it is limited by a second principle, which is that there is no liability for any damages except those resulting probably and proximately from the breach of duty. Negligence alone will not create a cause of action, nor will an injury which is only remotely due to the negligence. "It were infinite," said Lord Bacon, "for the law to judge the cause of causes and their impulsion one of another, therefore it contenteth itself with the immediate cause and judgeth of acts by that without looking to any further degree." But simple as this rule may seem at first glance, it often becomes a question of "Scotch metapheesics" to tell whether or not the damages complained of are due directly to the breach of duty, or have been brought on or augmented by acts of the patient or other causes. In such cases, the evidence as to facts being conflicting, the question is left to the jury. But where there is no evidence going to show that the damages resulted from the negligence, the question is one of law for the court. In a late decision of the Supreme Court of the United States, since followed by our Court of Appeals, a more scientific test of legal causation was given than is usually found in the cases. It was there said:

"The question always is, Was there an unbroken connection between the wrongful act and the injury, a continuous operation? Did the facts constitute a continuous succession of events, so linked together as to make a natural whole, or was there some new and independent cause intervening between the wrong and the injury?" If any break occurs in the continuity of events, and a new factor, especially if it be an intelligent cause, comes in to determine the result, the first ceases to be the proximate cause of the event. Thus if A set B's leg negligently, yet direct him to keep his bed and not move the limb, and B, disobediently trying to use the leg, injures it so that the damage from the disobedience cannot be distinguished from that due to the negligence, B can have no action against A. So it has been held, that if I throw a lighted squib at A, who instinctively throws it toward B, I am liable to B for any damage from the explosion; for it is as if the squib had rebounded, A not having acted otherwise than mechanically. But if I sell to an infant gunpowder, which he gives his mother to care for, and she subsequently gives him some to play with, her interposition as an independent cause frees me from the liability for damages from an explosion, which I would have incurred had the explosion taken place while the powder was originally in the child's possession. And so in actions for slander, of which the gist is malice: if special damages be claimed, they must be shown to have resulted from the original utterance and not from the repetition by a third person of the slanderous words.

Having thus seen that toward the patient a physician is liable only for the proximate and probable results of his failure to use ordinary skill, knowledge, and care in the case, we come to the question of his liability where he is commanded by a statute to do, or forbear from doing, a particular thing; such, for instance, as the reporting of cases of contagious disease to the health authorities.

Here three principles are to be borne in mind. First, no one can be held liable in damages for strictly obeying the law. Second, the law does not excuse negligence; and, if its mandate be negligently carried out, an action will lie in favor of one suffering by its careless execution. Third, if a public statute be disobeyed, any one suffering injury from such disobedience as a proximate cause shall have his action for damages.

Suppose, now, the case in New York City of a physician, A, called in to see B, whom he suspects to be suffering from a contagious disease, *e.g.*, Asiatic cholera. A has a double duty. First, he owes to B, while under his charge, ordinary care and skill. Second, he owes to the public a statutory duty prescribed in Section 608 of the Consolidation Act, which provides that every practising physician in said city shall "report in writing to said board (*i.e.*, the Board of Health) every patient he shall have laboring under any pestilential, contagious, or infectious disease, and within twenty-four hours after he shall ascertain, or suspect the nature of the disease." He is required to report, not his beliefs, not his final diagnosis only, but his reasonable suspicion. Section 131 of the Sanitary Code, which was in force at the time of enactment, and was made binding by Section 557 of said act, ordains, "That every physician shall report to the Sanitary Bureau, in writing, every person having a contagious disease (and the state of his or her disease, and his or her place of dwelling, and name, if known) which such physician has prescribed for or attended for the first time since having such a contagious disease,

during any part of the preceding twenty-four hours; *but not more than two reports shall be required in one week concerning the same person;* but every attending or practising physician thereat must, at his peril, see that such report is or has been made by some attending physician." This, then, is A's public duty, to report in writing to the health officers cases of contagious diseases within twenty-four hours after he *suspects* their nature, and to see that semi-weekly reports are thereafter made. What is his liability for so doing? Section 559 of said act provides that, "No member, officer or agent of said Board of Health, and no person (but only the board itself) shall be sued or held to liability for any act done or omitted by either person aforesaid (in good faith and with ordinary discretion) on behalf of, or under said board, or pursuant to its regulations, ordinances, or health laws." A, therefore, being a person acting pursuant to the health laws is, by the statute, and even without the statute, by common law, exempt from any liability except such as is due to his own bad faith or lack of ordinary discretion. Let us now assume that through careless diagnosis A reports B, whom he finds suffering pain, to have the Asiatic cholera, whereas he in fact has gout. Here he has failed in ordinary discretion, has been negligent, and the jury are entitled to pass upon that fact. What is the measure of damages which B can recover? Evidently all the injury resulting proximately from A's report, that is to say, injury which has no independent cause other than that report; this proximate result can only be the visit of the health officer and such consequences as may flow from that visit, entirely distinct and apart from the acts of the officer, who is himself an independent cause so far as the results of whatever action he may take are concerned. Thus, if by reason of that visit B suffers inconvenience, and loses the custom of the neighbors who, perceiving the health officer entering his house, shun B's place of business, it would seem that this damage, which must always be nominal and difficult of proof, may be probably considered a proximate result of A's negligent report. But suppose the health officer, on his own examination and diagnosis, causes the removal of B to the hospital, for this act and its results A cannot be held liable, any more than the vendor of gunpowder above-mentioned was held liable for the explosion. Such removal is not a proximate or probable result of the report. There is no statute or ordinance commanding that the infecters shall be taken from their homes, nor is it understood to be the custom of the health authorities in all cases to make such removal.

Certain contagious or pestilential diseases, such as Asiatic cholera, yellow fever, and that California bugbear, leprosy—if it be contagious—are so rare that many physicians in general practice may never have seen a case of any one of them; the same is true, to a less extent perhaps, of small-pox. Such practitioners may have the general knowledge of these diseases belonging to educated men of their profession, and yet be as unable to form a true diagnosis of them within twenty-four hours as a lawyer in general practice to give an off-hand opinion on a difficult question of patent law or criminal pleading. Therefore the statute contemplates that physicians may report their suspicions—which of course must be based on reasonable grounds—to the health authorities, who in such matters are—in legal contemplation at all events—experts. Those authorities decide what shall be done with the patient. The section of the Sanitary Code above italicized, and several provisions of the Consolidation Act, contemplate leaving the patient in the physician's charge with provision for semi-weekly reports of the case. To show how illogical is the assumption that A is liable for the health officer's act in removing B, it is only necessary to reverse the hypothesis. Suppose B's malady to be in fact yellow fever, but that the health officer, concluding it to be gout, leaves the patient undisturbed, and that A withdraws from the case, leaving another physician in charge. Is A to be held liable on account of his error in diagnosis for the act of the health officer in leaving a case of contagious disease unguarded, or for any acts of the physician in charge? Certainly not, and yet that is the logical outcome of the theory that he is responsible for the removal in the first hypothesis, which is thus refuted by a *reductio ad absurdum*.

Our argument so far, if its reasoning be cogent and its statements of law sound, demonstrates: First, that no physician who, in good faith and with ordinary discretion, reports in writing to the Sanitary Bureau that he suspects a particular patient to have a contagious disease, can be held to any liability in damages for so reporting. Second, that even if his diagnosis be negligent, or not made with the requisite skill, the measure of the damages for which he can be held liable will be whatever injury *may be proved* to have resulted from his report as a proximate cause; this, it seems, can only be the nominal damage incident to the fact that a visit has been made to the patient by a health officer, but not the damage incident to that officer's acts. It may be concluded safely, therefore, that the risk incurred by so reporting is practically too small to be much considered.

But assume that, rather than take this trifling risk of litigation, A should prefer to conceal the fact that his patient B has a contagious disease rather than to report it. In that event, having violated the statute, A is liable not only to its penalties, but in damages also to every one who may prove himself to have sustained injury directly from A's breach of duty. In short, the liability is increased in a tenfold, or even greater, degree.

No man is insured against vexatious litigation. The most innocent and the wisest may be proceeded against with little color of right. "There be three things," said the wise king, "which are too wonderful for me, yea, four which I know not. The way of an eagle in the air; the way of a serpent upon a rock; the way of a ship in the midst of the sea; and the way of a man with a maid." He would add, if he lived to-day, "the way of a petit jury with a verdict." But it would seem that if there is one man who is insured against litigation on account of his act, or is reasonably certain, if action be commenced, either to win his cause or at worst suffer a verdict for only nominal damages, it is the physician who reports cases of contagious disease according to law. Small verdicts to plaintiffs do not foster a desire to institute such actions. And as a practical illustration of this immunity it is to be remarked that although for fifty-seven years we have had a statute requiring such reports, there is not one case reported in the digests of an action brought for this cause.

THE HYPODERMIC INJECTION OF OIL.—A correspondent of the *British Medical Journal* writes: "It appears that some success has been met with in America, in injecting various oils for different purposes; and, among other applications of the method, it has been used in cases of gastric ulcer, in order to supply nourishment. In a case of this sort under my care, which has made very little progress for many weeks under ordinary treatment, and where emaciation is becoming alarming, I have tried hypodermic injection of oil; but the operation causes much pain, and is followed by very painful cutaneous inflammation, so that I have been forced to give up the attempt. I need not say that every step was taken to insure success, the oil used being the purest cod-liver oil, and the syringe previously cleaned in hot water. The oil was injected into the subcutaneous areolar tissue. I shall be glad to hear something of the experience of those who have tried this method of feeding, as it seems a matter of great importance. My patient is daily losing ground under careful rectal feeding, and her stomach can tolerate nothing but a few drops of milk at long intervals. If subcutaneous feeding can be carried out, her life, like that of many others, may be saved. Would deep injection involve danger of oil-embolism? Would it be likely to cause less pain?"

COINCIDENT FRACTURE AND DISLOCATION OF THE STERNUM BY INDIRECT FORCE.

By J. P. TUTTLE, A.M., M.D.,

NEW YORK.

FRACTURE or dislocation of the sternum by indirect force is an injury of such rare occurrence as to render the following case, in which the two are coincident, almost, if not entirely, unique.

On September 20, 1884, J. B——, aged thirty-four, a stout, compactly-built man, dived from a post about six feet high into the surf, where the water was shallower than he thought. He struck forcibly against the sandy bottom, he says, on his head; but there was no proof of this—not even sand in his hair. He was shocked for the moment, but gained his footing, walked ashore, and to his house, about a hundred yards distant. I saw him shortly afterward, in company with Dr. C. Jay Seltzer, of Philadelphia, when he complained of pain in his "neck, breast, and shoulders." Movement of any kind in the arms or head was very painful, but no lesion of the spinal column could be found. An examination of the chest showed plainly a separation of the manubrium from the gladiolus, the latter overlapping the former.

In attempting to reduce the luxation, by placing a knee between the scapulæ and drawing the shoulders forcibly backward, at the same time pressing upon the upper end of the gladiolus, we observed distinct bony crepitus, and found it to proceed from a fracture of the gladiolus about one and three-quarter inches below the luxation.

Later, the patient was placed on his back with a large, hard pillow underneath the shoulders, with head and pelvis lower. By this means the location was completely reduced, and pressure on the upper end of the gladiolus showed both crepitus and slight deformity at point of fracture below, which Dr. Seltzer, and Dr. Phillips, of New York, both verified.

All that the patient complained of then was pains in the neck and breast. Those in the neck were evidently muscular, as they were not increased by pressure on the head or counter-strokes on the soles of the feet, and were increased by pressure or handling of the muscles of the neck.

The patient progressed with very few disturbances, the temperature rising at one time to 100.5°, and in four weeks was completely recovered, with very slight deformity at the point of dislocation, and a small amount of callus about the point of fracture.

The case is of interest on the following accounts:

First, there was concomitant fracture and dislocation of the two portions of the bone. Bony union had evidently not taken place between the manubrium and gladiolus.

Second, there was no other accompanying injury. The pains in the neck and shoulders were due to muscular strain, and, as will be shown further on, were produced by the same force that caused the main injury.

Dr. Hamilton reports a case, in his admirable work on fractures, in which this dual injury existed, but was accompanied by compound comminuted fracture of right leg, fracture of the necks of the first four ribs on each side, dislocation of sternum from cartilages of both second ribs, dislocation of left third cartilage from its rib, and paralysis of the bladder. The patient lived three days.[1] Dr. Watts, Jr., reports a somewhat similar case, with almost as many accompanying injuries, in which death occurred much sooner, and in which there was strong evidence of spinal concussion, at least.[2] Several cases of fracture of the sternum by indirect force are reported by Truehaart,[3] Levis,[4] Butterham,[5] and Lane,[6] but in none of them was the double injury found.

[1] Hamilton on Fractures, p. 183.
[2] American Medical Times, vol. iii., p. 55.
[3] Medical Herald, Louisville, March, 1880.
[4] Philadelphia Medical Times, December 29, 1883.
[5] Lancet, London, March, 1884.
[6] British Medical Journal, March, 1884.

Third, the injury was produced by indirect force, from a headlong fall. This is a point to which I would call special attention, as a satisfactory explanation of the production of such injuries has not yet been given. It is very evident how a patient falling across a bar or other object, on his back, may fracture or separate the bones of the sternum by forcible extension of the abdominal and sterno-cleido-mastoid muscles. Such cases are reported by various observers.[1] But how the force of a fall upon the head can be transmitted to the sternum without fracture, dislocation, or some injury to the cervical vertebræ, is incomprehensible to me.

Dr. Johnson reports a case of fracture of the sternum which the patient says was produced by falling on his head from a hay-cart.[2] In the cases of Hamilton and Watts mentioned above, the force is also supposed to have been exerted first on the head. But in none of these cases is there any injury of the head, not even a contusion, mentioned. It seems impossible for the injury to be thus produced without some such accompanying lesion, and either rupture of the spinous ligaments or, at least, concussion of the spinal cord.

The natural and well-known fact that men falling headforemost extend their hands unconsciously in order to catch the force on them, and thus save their heads, and the almost invariableness with which this position is assumed by divers, suggested that my own case, at least, and perhaps some others, might have been produced by falling upon the outstretched hands, and the transmission of the force thence through the clavicles and first ribs to the upper portion of the sternum.

The force thus expended upon the manubrium is a downward (with reference to the body) and backward force, while that exerted upon the gladiolus by the momentum of the body and abdominal viscera, through the diaphragm and lower ribs, is an upward and forward one. These two forces acting at variance, it is not difficult to see how fracture of the sternum may be produced; and if it occur below the juncture of the gladiolus and manubrium, which it does not in most instances, how a consequent dislocation of these two bones is likely to occur; for, after the fracture, the bending backward of the upper fragment furnishes an inclined plane of resistance to the lower end of the manubrium, off of which it easily slips and thus becomes dislocated, the third and fourth ribs still forcing the top fragment of the gladiolus upward and forward. The existence and direction of these forces can be demonstrated by observing the motions of the clavicles and sternum of an acrobat when he first rises to walk on his hands; or the first may also be seen in a well-articulated skeleton.

In view of these facts it is reasonable to suppose that the above case of my own, and perhaps that of Dr. Johnson, fell upon their hands first, and only struck their heads, if they struck them at all, after the force had been expended upon the sternum and it had given way. Of course, such an injury could only occur in this way in a person with large, strong clavicles.

As to the pains in the neck and shoulders, the strain upon the muscles thereabouts, especially the sterno-cleido mastoids, and the tension upon the shoulder-joints, would easily account for these, although I may mention that Dr. Gross considers pain in the back of the neck an almost constant symptom in dislocation or fracture with displacement of the sternum, whether by direct or indirect force.[3]

The fourth point of interest in this case, doubtless the first to the patient, is his recovery: truly, not from any superior treatment, but solely because the injury was uncomplicated by more serious ones, as were the cases of the distinguished observers mentioned. I have seen him frequently a year after the injury, and slight deformity at both points of injury exists.

[1] Hamilton, loc. cit., 181. Malgaigno on Fracture, Arch. de Med., 1827; Gaz. Med., 1842. Gross-System Surgery, 964.
[2] Med. and Chir. Rev., N. S., vol. xvii., 536.
[3] Loc. cit., 962.

It may be argued that the clavicle would give way before a fracture of the sternum could be produced. But Dr. Arbuthnot Lane has shown by experiment on the cadaver that heavy blows on a padded shoulder will produce fracture of the sternum. He claims, however, that the force is transmitted, not from the clavicle to the sternum direct, but "*only* through the first and second ribs." It is easy to see some influence of the first rib, at least, but to admit the "only" is very difficult, seeing that the clavicle and sternum are more closely connected than the clavicle and first rib. Maisonneuve attributes the fracture to force transmitted through the clavicle, as does also Levis, who remarks that the simple fracture is by no means so rare as the standard works on surgery would lead one to believe.

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CARDICENTESIS.

By A. H. P. LEUF, M.D.,

Pathologist to St. Mary's General Hospital, to St. Mary's Female Hospital, and to the Hospital for Nervous and Mental Diseases, and Secretary of the Brooklyn Pathological Society, etc.

A paper entitled "As to Cardiac Aspiration" appeared in The Medical Record of November 14, 1885. Dr. W. S. Cheesman is the author. The note calls for a reply. It is gratifying to see that the doctor's interest in the subject is unabated, for he has been in the field before opposed to the procedure. He mentions my paper on "Pulmonary Congestions and Cardiac Aspiration," that appeared in the *American Journal of the Medical Sciences* of January, 1885, and the editorial in The Medical Record of October 31, 1885, on Mr. Dacre's case of aortic aspiration, as the latest contributions to this subject. Another, however, appeared in the editorial columns of the *Journal of the American Medical Association* of April, 1885, in which the advisability of the operation is upheld in unmistakable terms.

Dr. Cheesman next reiterates his objection to cardicentesis on account of the danger of laceration of the auricular wall. To prove this he cites a case that came under his observation while interne at Bellevue. "A hypodermic needle was introduced into the space uncovered by lung" for the purpose of *pericardial* aspiration. "The syringe filled with blood, and was at once withdrawn. While being withdrawn, the needle was distinctly felt to be moved with or against the heart in its contraction." The patient died very gradually six hours after the aspiration. At the autopsy the heart was found enveloped with a blood-clot, and a quarter-inch rent was found on the right ventricular wall "in one spot between the columnæ." The heart was hypertrophied and fatty. Having seen such rents with similar after-effects in the same class of hearts and without any puncture, a doubt naturally arises in my mind whether the hæmopericardium in Dr. Cheesman's case was due to aspiration, or may not have been spontaneous. Nothing is said of a corresponding opening in the parietal pericardium, or of the site of the rent in the right ventricle with reference to the needle opening in the thoracic wall. The probability, however, is that the puncture was the cause.

It is not fair to offer this case in opposition to the operation. Surely neither Dr. Westbrook, Dr. Roberts, or myself would care to aspirate a *fatty* heart. That has never been advocated. Another important point is the fact that a hypodermic needle is a little too short to be used with safety. It should be long enough to sufficiently penetrate the heart cavity, so as to offer a minimum resistance to the cardiac movements at its point of entrance. A short needle is relatively more rigidly held in the thoracic wall, and its point more fixed and unyielding, than a long one. The normal elasticity and contractility of the heart-wall diminishes when it has undergone fatty changes. Even in Dr. Cheesman's case there probably would have been no outpouring of blood if the needle had not just happened to strike such an exceptionally thin part of the heart. Another case of accidental puncture is mentioned as having happened to a member of the visiting staff at Bellevue. No more is said about it, and so there can be no discussion on that.

Dr. Cheesman confesses himself "frightened" at a little hæmopericardium because "they mean leakage, hæmopericardium, which in some other cases may be sufficiently abundant to kill." That such may now and then occur is self-evident. But is there not a certain risk to life in almost any surgical interference? Even so simple and usually harmless a procedure as tooth-pulling has more than once resulted fatally. No one ever denied the danger of cardicentesis in all diseased conditions of the heart in which there was weakening of the walls. For these cases it is not intended, and I believe I am echoing the sentiment of all advocates of the operation in imploring the forbearance of experimenters in this class of cases. If Dr. Cheesman will limit his fears and objections to this unwarrantable, meddlesome interference, there will be unanimity.

In my former paper it is expressly stated that "the operation was designed for the relief of the heart laboring under physical difficulties, and especially without organic disease." Given a case of organic disease without weakening of the heart-walls, and we can only hope for temporary relief by aspiration, because it does not remove the cause. In a case of over-distention, however, of the right side, in an undiseased heart, with empty peripheral veins and a weak systole, permanent relief, cure, may be effected by the timely performance of this operation. I maintain that this operation, if done at all, should be performed as soon as its necessity seems assured.

The operation has recalled to consciousness and maintained in that condition a man, for a number of hours, who had been *in articulo mortis*, and was almost momentarily expected to die. The benefit of such restoration of the mind for so long a time, under innumerable readily-imagined circumstances, would be of incalculable value. The value might relate to the family, business, politics, war, science, art, etc.

I also desire to "actually" reassert that cardicentesis properly performed is simpler and less disheartening to the patient than the ordinary phlebotomy, and would maintain this assertion at length if worth so much space.

The last point in the paper under discussion is one that it would have been better not to raise. It is said, 'One other point has been made much of by Dr. Leuf (in his article above-referred to), viz., that the conception of this operation was original with Dr. Westbrook." Dr. Cheesman is guilty of rather a remarkable error in this instance. He really makes no distinction between mere sight, discovery, and device or invention. One man sees a thing, and may even handle it without putting it to any special use—he sees or experiences; another notices a special use for it—he discovers; still another, by reasoning, finds for it a special use, or, arguing from effect back to cause, detects the existence of the thing or body from the use to which it is to be applied—he devises, he invents, to discover and apply. Two men quarrel, one picks up a knife and introduces the point into the other's heart—he performs cardicentesis. This is being done now, was done centuries ago, and will be done as long hence. This is the man who merely sees or experiences. A number of professional brethren have accidentally penetrated the heart with hollow needles, much to their surprise and alarm. Of these Dr. Cheesman speaks. They are the men who simply discover, and without appreciating the value of what they observe. Dr. Benj. F. Westbrook saw certain conditions of the heart associated with others of the circulation, and reasoning from effect back to cause, devised for, invented for, and applied the unappreciated and undeveloped experience of others to this condition, and is the originator of the operation of cardicentesis. John Hunter devised a surgical method for the treatment of aneurism, and the procedure was ever after called his. So the chancre,

which he was the first to describe so well. Leverrier, of France, and Adams, of England, accomplished a similar end, but higher in degree, in the determination of a planet that must have been seen again and again by competent observers without its character being suspected. To these men justly belongs the credit they receive, and not to some other, who could, perhaps, prove that he happened to see this body before its discovery was announced. And, although Leverrier announced his discovery a couple of weeks before Adams did his, the latter deserves equal credit with the former because his methods were as independent and original. To Bunsen and Kirchoff, of Germany, also belongs the honor of having done the same class of work in painstaking search after the metallic elements rubidium and cæsium, the existence of which had been determined by *a priori* reasoning. Suppose others had handled these metals before them, could these latter dispute with Bunsen and Kirchoff the title of discoverers, when they had to learn from them that it was something hitherto unknown? Certainly not, and that is precisely the position of cardicentesis to-day, but of inferior degree, in reference to the claim I make for Dr. Westbrook, and that Dr. Cheesman makes for the other gentlemen. Dr. Cheesman has just as much right, in principle, to the credit of owning this operation as have either Roger or Hulke, for both the latter performed accidental puncture.

Dr. Westbrook was the first one to deliberately plan and perform cardicentesis. Dr. Cheesman is wrong to say I "made much" of this being "Westbrook's operation." I only desired to give full credit, and this I did. Only once in my whole paper is the expression "Westbrook's operation" to be found. It was put so inadvertently in that instance, as I am not in favor of naming operations after individuals. Cardicentesis, therefore, has been called "Westbrook's operation," because it is.

Concerning M. J. Dacre's case, in the *Bristol Medico-Chirurgical Journal*, it is proper to note that there was considerable fluid in the lungs previous to the operation, and that this was only performed when the patient was without pulse and with hardly a systolic sound. Dr. Westbrook's first case was also one with œdematous lungs. In such cases only transient relief can be hoped for. It is, however, another one added to the cases that prove cardicentesis a safe procedure when judiciously performed.

It also seems, according to Mr. Dacre's experience, that the right fourth intercostal space near the sternum is the proper place of entrance for puncture of the right auricle. This does not agree with numerous very careful and painstaking anatomical observations that were made by Dr. Westbrook, and others by myself for him, as they showed, with but two exceptions, I believe, that the right third intercostal space, close to the sternum, was the safest and most certain. The right auriculo-ventricular groove and the artery it contains usually cross the right fourth intercostal space obliquely downward and outward.

The needle should be long and made to penetrate deeply into the auricular or ventricular cavity. It should also be introduced very rapidly. The best way is for the surgeon to grasp the needle firmly at a point where, when it is in position, it would just be at the surface of the chest, and then it should be quickly plunged directly backward, so as to penetrate the auricular wall at the same time that it perforates the parietal pericardium.

There will soon appear in another journal the account of another case of cardicentesis by Dr. B. F. Westbrook. The criticism I wish to make upon it is that the malady had progressed so far that permanent reaction was hopeless. This leads me to again emphasize the necessity of operating early. Just so soon as we have a very reasonable excuse for supposing that a dangerous dilatation of the heart is inevitable, I believe it to be our duty to aspirate freely and without delay.

Another point worthy of reconsideration is the site of puncture in the chest and heart-wall. On account of the difference in thickness and contractility of the auricular and ventricular walls, it might appear safest to enter the ventricle. The base of the heart, though, is less movable than the apex, and on this account there is least strain upon the cardiac wall at the base. The question as to the relative proportion between the thickness of these walls and the mobility of the corresponding parts of the heart can only be settled by future experience.

In conclusion, I would say to Dr. Cheesman that I fear he misunderstood the tone of my call for a description of the cases he formerly alluded to, and which he tells us were those reported by Dr. Dana. No sarcasm was meant, but the questions were put honestly, and I trust the Doctor will so consider everything said in this paper. Personal feeling should be understood as excluded from all scientific discussions.

Clinical Department.

HYDROGEN PEROXIDE IN THE TREATMENT OF ULCERS AND SINUSES.

Dr. C. G. Roehr, of Milwaukee, Wis., writes that he has used peroxide of hydrogen, with excellent results, as a disinfectant and stimulant to old ulcers and sinuses. When injected into sinuses containing exuberant granulations it destroys these, leaving uninjured the healthy tissues. There is very little pain, and a rapid improvement ensues.

MELANCHOLIA.

Dr. S. A. Defoe, of Washington, N. J., writes that he has found the following to give excellent results in melancholia. ℞. Valerianates of zinc, quinine, and iron, each twenty grains, to be divided into twenty pills. One pill is to be taken three times a day before meals. The drugs should be absolutely pure. Dr. Defoe says he has tried this remedy thoroughly, and finds it a specific for the worry of nervous women and for incipient melancholia.

COCAINE IN SEA-SICKNESS.

Dr. J. B. Bissell, of this city, writes us as follows: "Cocaine has been recently recommended as a remedy in sea-sickness, particularly by a Russian physician, who claims to obtain speedy and certain relief by its use in this affection. In a voyage from New York to Charleston, S. C., made in November of this year, an excellent opportunity was afforded to ascertain the value of the drug in this regard. The time of passage was four days, the weather fair, and no storms, but a head wind lasted all the way. The experiments were made on twenty-seven persons of both sexes, and from four years of age to forty-eight. The hydrochlorate of cocaine, in doses of a twentieth and a twenty-fifth of a grain, in tablets, was given by mouth. In one set of cases the medicine was begun soon after leaving the wharf; in another set at the first symptom of nausea; in a third set not till vomiting had taken place. In the first set the dose was a twentieth of a grain, repeated every hour till two grains had been taken. In the other cases a twenty-fifth every fifteen minutes up to two grains, or, as happened in nearly every case, till the patients became so sick that they refused to continue the drug. This was usually after the fifth or sixth dose. The results from these three sets of cases were almost precisely similar. In twelve cases there was no improvement, if the treatment did not positively make the patients worse. In six cases there was certainly an increase in the severity of the symptoms. In only three of the twenty-seven cases was there apparent benefit, and this improvement was coincident with a temporary improvement of the weather. As the sea became rougher

all three relapsed, and in spite of the cocaine became very sick. The other six of the twenty-seven were at sea for the first time. One of these was not sick at all during the trip. The others, however, did not escape. I did not notice any special influence exerted by the age or sex of the person treated. Such results as the above ought to dispose of cocaine as a remedy in sea-sickness, but as these results don't advertise any one's special method of administering the drug, or any firm's special preparation, it is very likely it will continue to be used till a newer remedy comes into fashion."

WHAT WAS THE CAUSE OF DEATH?

Dr. John H. Sevier, of Brownsville, Tenn., sends us the following: "L. C——, a colored primipara, aged twenty-eight years, was admitted to the lying-in ward of the Medical College Hospital, Nashville, Tenn., in January, 1884, while I was house surgeon. She appeared to be perfectly healthy. Soon after her admission I was sent for, in the absence of the house physician, and found her in the first stage of labor. The case progressed nicely, when suddenly she became comatose, with stertorous breathing, and died in a few minutes. The visiting obstetrician was at once summoned, and he arrived promptly, but too late to save the child by Cæsarean section. There was no evidence of poison, or reason to suspect any, and it was thought that she had died of apoplexy. Post-mortem examination, however, revealed no clot in the brain, nor lesion of any organ whatever."

SCIATICA RELIEVED BY A SINGLE COCAINE INJECTION.

Dr. W. B. Menz, of Vidalia, La., writes that he was called to see a lady, fifty-five years of age, who had been a constant sufferer from sciatica for ten years. The pain was very severe, and extended along the entire length of the nerve. She had run the whole gamut of antineuralgic remedies, and had never obtained anything more than very transitory relief. Having with him a vial of a four per cent. solution of cocaine hydrochlorate, Dr. Menz determined to try the efficacy of a subcutaneous injection. The hypodermic needle was inserted deeply over the sciatic foramen, and about twenty drops of the solution were passed into the tissues. The pain ceased almost immediately, and during the six weeks that have since elapsed has not returned, although there has been no further treatment, and one injection only was practised. The relief given by other remedies had never been of more than from two to four hours' duration.

POPLITEAL ANEURISM—LIGATION OF THE FEMORAL ARTERY—RECOVERY.

Dr. J. B. Houston, of Malden, W. Va., reports the following case: A. H——, twenty-eight years of age, a miner, had suffered for a long time from pain in the thigh and popliteal region, most severe while he was at work and standing, and relieved only when lying down at night. After some months he noticed a small tumor in the popliteal space, about the size of a marble, soft and compressible, but does not remember that there was any pulsation perceptible in it at this time. While playing a game of base-ball one day, he felt as though "something had given way under the knee," and the pain was greater after this. The physician whom he had consulted from time to time, noticing the rapid increase in the size of the tumor, at length advised compression, using an instrument devised by himself for this purpose. The pain and œdema caused by the application of this compressor soon compelled its discontinuance. At this time the patient consulted Dr. Houston, who found an aneurism nearly filling the popliteal space and covered by tense skin, which seemed to be upon the point of ulcerating. An immediate operation was advised, and assented to by the patient. "Accordingly, on October 19th, assisted by Drs. Thomas and Tompkins, of Charleston, I proceeded to operate, exposing the artery near the entrance to Hunter's canal. After reaching the vessel without trouble, and direct pressure being found to stop all pulsation in the aneurism, I tied the artery tightly with a silk ligature, leaving one end out of the wound, which was closed by interrupted suture. The wound healed rapidly and pain in the leg ceased. Shortly after the vessel was tied I wrapped the leg in cotton batting and placed it, slightly flexed, on a pillow in the bed, and kept it at about the normal temperature with bottles of hot water under the bed-clothes, but not touching the limb. There was no œdema of the foot or leg, nor were there any symptoms of lowered vitality in the limb. The temperature of the skin was somewhat elevated for the first two days, due, I suppose, to the increased capillary circulation. On November 24th, just five weeks after operation, I pulled out the ligature, the wound having entirely closed except along the track of the ligature. My patient is walking, has no pain, and the aneurism is hard and reduced to half its size, having decreased more rapidly in the last three weeks than in the first two weeks after the operation."

CIRRHOSIS (?) OF THE LIVER IN A YOUNG CHILD.

Dr. E. Frank Marsh, of Oswego Falls, N. Y., writes: "On November 13, 1885, I was called to see a male child, aged two years and eight months. I found him suffering from marked ascites, with elevated temperature, respiration 56, and pulse 150. There was considerable jaundice, urine high colored and scanty, but no œdema of lower lids, or of feet. He took scarcely any nourishment, but drank eagerly. The mother said the child had been failing steadily for several months. Two days later, I introduced a trocar and drew off nearly two quarts of fluid. The opening did not heal for several days, and the serum continued to dribble away. The operation seemed to relieve the child, and after the removal of the effusion I could make out the liver considerably enlarged, and extremely hard. I pronounced it a case of cirrhosis of the liver. The father died of the same disease a little more than a year ago. The child continued failing till the 28th, when he died. There was no post-mortem examination. Upon investigation, I cannot find a case of cirrhosis recorded in so young a child as this, and in this case the abuse of spirituous liquors was certainly not the cause of the disease."

The Doctor's Peculiar Danger.—*The Medical Age* deals with a delicate subject in the following skilful manner: "The physician, especially if he has been favored by nature with physical attractions, is above all men subject to sexual temptations. His relations to his female *clientèle* are of that secret and confidential nature which tends to familiarity. Weak women, who are diffident and shy toward all other males, frequently conceive for their physician a passion which it would require but a slight response to convert into a crime. We apprehend there are few of our readers whom professional experience has not convinced of this frailty (which may, after all, be more or less physiological) on the part of the weaker vessel. In view of this fact it is very complimentary to the profession that there are so few scandals chargeable to it. As compared with even the clergy (the especial conservators of morals) physicians stand well in this respect. Doubtless, too, not a few of the scandals chargeable to medical men have no sufficient foundation, the peculiar relations of the doctor to his female patients laying him especially open to the schemes of the blackmailer."

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GEORGE F. SHRADY, A.M., M.D., EDITOR.

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TRAINING-SCHOOLS FOR ATTENDANTS IN ASYLUMS FOR THE INSANE.

THE Buffalo State Asylum for the Insane has recently taken a most important step in the direction of securing a higher grade of qualification of attendants upon its wards. The plan, prepared by the Superintendent, Dr. Judson B. Andrews, and the First Assistant Physician, Dr. William Granger, contemplates a regular system of training attendants for their duties by a course of special instruction, didactic and clinical. The result will be to improve and elevate the standard of service in the care of the insane, and to give to the institution under their charge the benefit of a corps of attendants skilled in this special work, and who may make it a permanent occupation.

The plan of instruction is the outgrowth of a system begun by the officers of the Asylum in October, 1883, among a limited number of attendants. The benefit derived both by them and the Asylum has been such as to induce the Board to offer to all the attendants, who are found qualified, the advantages of instruction in the care and nursing of the sick and insane. From the rules adopted by the managers we gather the following facts regarding the employment, training, and pay of attendants who avail themselves of the offered facilities for advancement in education. The most desirable age for attendants, both men and women, is from twenty-one to thirty. All applicants for the position of attendants are required to be in sound health, and to furnish testimonials of good moral character and of correct habits, from at least two responsible persons. They must be of pleasant and kindly disposition, and possess such mental and educational qualifications as give promise of fitness for the work. All applicants must pass the Civil Service Examination, as required by the law of the State. After a probationary period of two months, if found capable and satisfactory, they shall, before being permanently employed, sign the agreement required of all employees. All attendants are to be instructed in the rules and regulations of the Asylum, and in the duties of their several positions. The special training of the school will be given by the Assistant Physicians, under the direction of the Superintendent, in such studies and methods as will best fit those who receive the instruction for the special work of attendants upon the insane and for nursing the sick. The course will occupy two years, and will consist of lectures and clinical instruction. The lectures will be given on the fundamental principles of physiology, and of hygiene, including ventilation, clothing, bathing, etc., with the usual directions for the care of the person, the bed, and the room of the sick. Instruction will be given upon the most commonly used remedies and their effects, upon the use of the catheter, the taking of temperatures, the administration of food, the control of hemorrhage, and the application of minor dressings. Special attention will be given to teaching the best methods of caring for the various classes of the insane—the violent, destructive, suicidal, and epileptic, as also the quiet and convalescent—with directions as to exercise, occupation, amusement, and companionship. They will be taught to meet emergencies, how and what to observe, and to make written reports upon the physical and mental condition of patients. All who join the training-school must, at the end of the first year, pass a satisfactory examination before entering on the second year's instruction. At the close of the second year, after passing the required examination, and giving satisfactory service, they will receive a certificate from the institution as well-qualified nurses and attendants upon the insane. Those who take advantage of the instruction of the school will receive, after passing the examination at the end of the first year, the women at the rate of fifteen, and the men at the rate of twenty-five dollars per month, and two weeks' vacation, annually thereafter, without deduction of pay, at a time subject to the convenience of the Asylum. After passing the examination at the close of the second year, and receiving a certificate of qualification as trained nurses and attendants, they will be paid, the women at the rate of eighteen, and the men at the rate of twenty-eight dollars per month, respectively. The trained attendants who are placed in charge of wards will be paid, the women at the rate of twenty, and the men at the rate of thirty dollars per month, respectively. The acceptance of the advanced pay attached to these propositions shall carry with it the obligation to remain in each case at least one year longer in the service of the Asylum, subject to the provisions of the agreement. For long and faithful service an increase in the pay per month may be provided in special cases. In addition to the pay, attendants receive board, lodging, washing, and medical care during temporary illness.

The practicability of a training-school in an asylum has heretofore been in doubt, but the experience of the managers of the Buffalo Asylum has fully demonstrated not only that it is practicable, but that such a school is really necessary to the highest grade of care of the insane. The members of the Resident Medical Staff, who carry out the details of instruction, are united in their expressions of satisfaction with the results of teaching. The attendants enter into their studies with great interest, and find in the school a pleasant diversion from their monotonous duties, a new field for their improvement, and the preparation for a life's occupation. Several illustrations of the value of the instruction given can now be furnished from the records of the institution. A patient was recently found at night by a trained attendant suspended from his bedstead by a handkerchief about his neck. The attendant cut him down, and began to

apply Sylvester's method of resuscitation, while an assistant pulled the tongue forcibly out of the mouth. After a few minutes the patient began to breathe, and when the physician arrived the emergency had passed. In two other cases blood-vessels have been wounded under circumstances involving great risk to life had not the attendants, in both instances, been competent to apply accurate pressure to the proper vessels.

We must conclude that the Buffalo Asylum has set a most praiseworthy example in establishing a Training School for its attendants, and that it has begun a new era in providing thoroughly qualified persons for the immediate and personal care of the insane.

THE RESULTS OF LARYNGEAL SURGERY.

THE operation of excision of the larynx was, we believe, first performed by P. H. Watson in 1866. He was followed by Billroth in 1873, and later by a number of surgeons, including Heine and Gussenbauer, of Prague; Langenbeck, Caselli, of Milan; Schmidt, of Frankfort; Foulis, of Glasgow, and others. In 1884 Hahn (*Arch. f. klin. Chir.*, xxxi., p. 171) collected the statistics of 52 operations for total excision. In 24 of these death followed in consequence of the operation. On the other hand, in 12 operations for partial removal, death followed in only 1 case.

The name of Billroth has been particularly associated with operations upon the larynx, and recently Dr. F. Salzer has collected the histories of the cases occurring in his clinic from 1870 to 1884. These include 11 of laryngeal section, 7 of partial extirpation, and 5 of total extirpation. It appears to one reading these records that nothing could be much more discouraging than Billroth's laryngeal surgery; indeed, a less noted operator would hardly dare publish so unpromising a series of cases.

In his laryngofission cases 10 patients were operated upon 11 times. Of these the wound healed in 8 cases, but in 6 there was subsequently either death or relapse; 3 cases ended fatally within eight days. The result of 8 operations for carcinoma was very unfavorable, since, out of the 8, in only 1 case was there no relapse (two years and nine months after operation).

In 7 cases of partial extirpation death speedily occurred in 3 instances. Of the 6 cases operated upon for carcinoma laryngis, a relapse occurred, and generally very speedily, in all instances but 2. These, however, had, at the time of the report, been operated upon for only two and four months respectively. In 3 cases the functional result was favorable, the patient regaining a certain amount of voice.

The 5 cases of total extirpation of the larynx is an uninterrupted record of death. The patients all had carcinoma, and all died within from one day to seven months after the operation. One patient, to be sure, recovered from the operation, and died later from a relapse; and a second recovered also from the operation, but died in five weeks from purulent pericarditis.

Out of 22 patients operated upon by Billroth, mostly for carcinoma laryngis, 19 are dead, and 2 more are extremely liable to a relapse.

Billroth's cases are much worse than those collected by Foulis. Of 26 cases of total extirpation, 14 died in consequence of the operation. Of the remaining 12, 3 died in relapse.

Still more favorable are the results obtained by Professor Thiersch, of Leipzig, reported by Dr. A. Landerer (*Deutsche-Zeitschr. f. Chir.*, xvi., 1 u. 2, p. 149, 1882). Of 4 cases of total extirpation for carcinoma laryngis, 1 died in consequence of the operation, 1 died of a relapse three months later, and 2 recovered and had no relapse (seventeen to eighteen months).

ONOMATOMANIA.

PERSONS who suffer from agonizing mental distress in their desire to recall certain names are said by MM. Charcot and Magnan to have "onomatomania," or verbal mania. An excellent illustration of this trouble is given: A young man, aged sixteen, of neurotic antecedents was suddenly taken with the following symptoms:

"While walking in the Champs-Elysées he met a gentleman whose acquaintance he had made during a journey to Rome. The young man stopped and conversed with him for some time. After they had separated he tried in vain to recall his name. Not succeeding, he tried to drop the matter, and think of something else. But the inability to recall the stranger's name pressed upon him more and more. He could not rid himself of the effort to remember it; he became depressed in spirits, his face was covered with perspiration, his hands cold, and he reached his rooms in a state of the greatest agony. After this, he frequently became subject to similar attacks of acute mental distress. To obviate it, he carried with him a memorandum book, in which he put the names of all his acquaintances, and to which he could, when in need, refer. This procured him some relief for a time, but his malady soon took a wider range, and he became possessed with an irresistible desire to know the names of all persons who passed in carriages or whom he met in railway trains. The impossibility of learning their names mortified and exasperated him, until, finally, he would go about avoiding the sight of every one, and at last retired to the seclusion of a country house."

Such is a type of an onomatomaniac. The mental and physical distress may be brought on by a failure to recall the names of persons or of things. The crisis of anxiety and pain ceases when the name is found.

MM. Charcot and Magnan state that this peculiar mental symptom occurs only in persons who have a distinct hereditary psychopathic taint. Every one can see that the symptom is only a morbid exaggeration of the very slight mental discomfort which many persons feel when they cannot recall a name which is tolerably familiar.

The disorder belongs undoubtedly among the milder types of the degenerative psychoses, and is closely allied with the disturbances known as agoraphobia, mysophobia, and *folie du doute*.

URÆMIC PARALYSIS IN THE AGED.

M. MAURICE RAYMOND in his service at the Ivry Asylum, has observed and studied a peculiar class of paralytic accidents occurring in the aged. These consist of more or less sudden attacks of hemiplegia, which may

involve the face and extremities, or only the extremities, and in which the paralysis is sometimes flaccid, sometimes accompanied with contractures. In those cases which end in death autopsy reveals no lesion in the brain, but the kidneys are uniformly found to be markedly diseased. M. Raymond divides the cases into three groups. In the first the patients are suddenly, without prodromal symptoms, attacked with hemiplegia, they become comatose, and die either immediately or after a lingering illness. Autopsy reveals neither clot nor softening. In a second class of cases the patients are suddenly taken with a hemiplegia more or less complete. If death ensues, the brain shows only evidences of œdema and some ventricular effusion.

The third class includes patients who have previously had a cerebral hemorrhage and hemiplegia. Upon this supervenes a new attack of hemiplegia, which, however, does not indicate a new hemorrhage, but rather a partial cerebral œdema and anæmia.

M. Raymond believes that these paralytic attacks in the aged are due primarily to renal disease and uræmia. Œdema and "anoxæmia," are produced by the uræmic poisoning, and M. Raymond quotes an experiment upon a dog to show that the production of partial cerebal œdema and anæmia will cause paralysis.

THE MAN WITH INTERESTING CASES.

The young medical man who launches his (largely Peruvian) bark upon the unhealthful seas of medical practice has many discomforts, obstacles, and dangers to encounter. Not the least among the minor ills—to drop our meritorious but ancient simile—is that of the man who always has a case to describe.

Some distinguished medical philosopher has remarked that he would rather be knocked on the head at once, than be stopped on the street and told about a case. This gentleman evidently had had some painful experiences, which perhaps warped his judgment a little; for, after all, to be knocked on the head is not only disagreeable but serious, while the man with the case is a depressive force rather than a destructive one.

Every one knows him, however, this man of many cases; he meets one at the street corner, at societies, he drops in at the office. He greets his victims with a pleasant "Good-day-how-is-practice-last-night-I-was-called-to-see-a-" etc., manner, and in a moment he is in the midst of bedside details of anguishing minuteness. One listens in a dazed way, catching now and then something about "injections," "temperature, "bowels," "bladder," and similar expressions; while perhaps the speaker ends temporarily with an explanation of why he called some other gentleman in consultation.

The case-fiend penetrates every stratum of society. To tell the story of his experiences with unhealthiness, is to him a kind of erotic joy. His cook, his wife, his druggist, the poor, the rich, the sick, the well, all get a share of his case-book. He drops into a case-recital as easily as Joseffy into a sonata, or a *première danseuse* into a pirouette; his intellectual life is in the verbal revival of his pathological experiences; of these he is a word-painter, pre-Raphaelitic in detail, persistent in purpose, and exhaustless in resources.

He is seen at societies, and here he acts as a dispersive force of singular potency upon members; and respectable gentlemen of our medical profession of high standing and large practice will steal on tip-toe out of side-doors, like thieves in the night.

But it is, after all, in his private relations that the man of cases is at his best; and the question of what shall be done with him is a medico-social problem of deep interest.

For our part, we urge upon these gentlemen a prompt reform. We would assure them that in many departments of medical knowledge clinical recitals can add nothing, and that in some directions the end of clinical research has been nearly reached. This should make these more than Roman viaducts of bed-side studies very careful. They should reserve these exercises of their memories, and cultivate somewhat more their logical faculty and the powers of interpreting the meanings of things. This bedside tattle of "cases" is too often the same kind of stuff as the gossip of a ladies' dressing-room.

A DISPENSARY THAT IS NOT WANTED.

At the recent anniversary meeting of the Presbyterian Hospital, it was announced that an Out-patient Department was contemplated "to meet the wants of the rapidly increasing population of the neighborhood."

The immediate "neighborhood" in question is mostly built up with brown-stone private residences. Farther east, in the tenement-house district, is the North-Eastern Dispensary, which treats 24,000 patients annually; and only six blocks away from the Presbyterian Hospital is the Mt. Sinai Dispensary, which gives 40,000 consultations annually. Besides these, is the Harlem Dispensary at 126th Street, and two special dispensaries on 59th and 125th Streets. There is already a total of eleven dispensaries in the Ward.

No new dispensaries are needed in this neighborhood, and, considering the present deplorable state of our medical charities, it is to be hoped that the project will be abandoned. We have already heard protests against it by physicians practising in the neighborhood.

THE NEW YORK ASSOCIATION FOR IMPROVING THE CONDITION OF THE POOR.

Some of the objects of this Association, as set forth in its Annual Report, are: To aid in carrying out the laws relating to the health and cleanliness of the city, to elevate the health and home-life of the poor, and to secure for the tenement-house population improved conditions of living.

In carrying out these objects we find that the Society has been very active in seeing that the Board of Health exercise its powers in abating the nuisances and sanitary dangers to which the poorer classes are especially liable. During ten months 956 complaints regarding these nuisances were received. Of these seventy-five per cent. were found to be well-founded, and action upon them was urged. A good work is thus being done here by the Association, since in many cases no relief would have been obtained without its interference.

We would suggest for the consideration of the Society a study of the question of the best methods of dealing

with the acutely sick or bed-ridden poor. There are thousands of poor families whose members dread the hospitals, and suffer great privations rather than go to these institutions. Methods of furnishing nurses, food, and medical aid to these persons might be devised. It is certainly better to cultivate among the poor a spirit of independence of charitable institutions of all kinds. When the poorer classes learn to think that they can send to a hospital any relation or dependent who becomes a little ill, it will be an unfortunate evidence of lack of independence as well as of sympathy and of the strength of domestic affection.

A LIFE THROWN AWAY.

UNDER the name of verruga, a peculiar eruptive disease, endemic in Peru, has been long known, but it would appear to have only recently excited the curiosity of the medical profession in that country. After an indefinite period of incubation, extending in certain cases during an entire twelvemonth, a peculiar warty or papular eruption makes its appearance, and is accompanied by severe and long-continued muscular and articular pains. The disease has never been much studied until within a few years past, and its nature and mode of origin are even yet involved in mystery.

Last August, Dr. Daniel Carrion, a resident of Lima, inoculated himself with the blood of a patient suffering from verruga, in order if possible to communicate the disease to himself, so that he might study its evolution. He was only too successful. After a period of incubation lasting twenty-two days he was seized with a grave fever, and despite energetic treatment, died seventeen days later. The symptoms of his disease were precisely those of another affection which had puzzled the physicians of Peru. This was a fever, differing in its symptoms from any recognized form of pyrexia, which had appeared among the laborers engaged in building a railroad in Oroya. It was called Oroya fever, and also anæmic fever, from the fact that excessive anæmia was one of the most prominent symptoms of the affection. It was supposed by some to be a form of malarial infection, while others, noting the fact that it was in Oroya that verruga was most prevalent, believed that there was an intimate relation between the latter disease and anæmic fever. The result of Carrion's costly experiment would seem to add weight to this latter theory. It is, however, not easy to discover any intimate relation between the two diseases, one an acute pyrexia, accompanied with profound changes in the blood, the other a chronic disease, requiring months for its development and characterized by a cutaneous eruption. But the descriptions of the diseases which we have seen are so meagre in details that it is impossible to form any intelligent opinion as yet concerning their supposed relationship. It is proposed to erect a monument to the memory of Dr. Carrion, and *El Monitor Médico* of Lima, has headed a subscription list for this purpose. While we think it right to honor the memory of one who has sacrificed himself in the cause of medical science, we cannot but hope that Dr. Carrion will have few imitators. Human life is too precious to be thrown away in mere experimentation, and the man who inoculates himself with the virus of an unknown disease, or who doses himself with a new drug in order to observe its toxic effects, without having previously ascertained its strength, is a fool, albeit a noble one. We have the lower animals to experiment upon, and we have no right to trifle with human life, whether it be our own or that of our neighbor.

MEASURE FOR RECONCILIATION.

IT is beginning to be felt on all sides that, unless some immediate steps be taken to change the present aspect of matters, the Ninth International Medical Congress must fail, to the serious and lasting discredit of American medicine. The present Executive Committee, realizing this, recently made a slight effort at conciliation by tendering appointments on the Committee to several prominent gentlemen who had previously openly withdrawn from the organization of the Congress. These appointments, we are informed, have been declined; and matters are thus left in a worse state than before. *The Medical News*, in its last issue, makes an earnest and in some respects effective plea for mutual concession and reconciliation; and it suggests, finally, that harmony can yet be restored by the present Executive Committee adding to its membership the Original Enlarged Committee on Organization, and then beginning the work of organization *de novo*. Our contemporary's efforts are well meant. It is unfortunate that they should be marred by an exploiting of Philadelphia's services to the American Medical Association and its principles, which, to say the least, is irrelevant and not in the best taste. There is also a little of an anti-climax in presenting, as its scheme for securing harmony, a plea that restores its esteemed and able editor to office.

For all this, we feel safe in saying that the plan proposed will receive the support of THE MEDICAL RECORD, if it at the same time means that New York will receive recognition in the organization on a basis purely of the scientific attainments and honorable standing of its medical men. No more than this has been desired at any time, and for its self-respect the profession of this city and State can hardly ask less.

So far, indeed, as THE MEDICAL RECORD, voicing the feeling of the great body of its readers, is concerned, it asks no more than a just measure of recognition for New York physicians. It may be expedient to reappoint the Original Enlarged Committee. The profession at large, however, is indifferent to this point, since it feels that this Committee would have no right or inclination to oppose the Congress simply on account of personal disappointment. But the question of equitable representation, on a basis that introduces no side issues, involves a principle and is vital.

If the present Executive Committee will now officer its sections on this basis, it will have the full and enthusiastic support of the great mass of the profession and of the medical press.

VASELINE AS A FOOD.—Dr. R. Dubois, of Paris, contends that vaseline is not a toxic substance, but, on the contrary, is digested in considerable amount, and acts as a food. Dubois' views are mainly based on experiments with dogs.

News of the Week.

BLISTERS do not draw well in warm weather, in this respect resembling some of our city churches. The reason in the case of the blister is that the skin is too moist, and water prevents the action of the cantharides.

COCA LEAVES cost about fifty cents a pound, and contain from 0.4 to 0.6 per cent. of cocaine.

THE CHARITY ORGANIZATION SOCIETY OF NEW YORK.—The Third Annual Report of this most useful Society has just been published. We are told that out of 55,000 dependent cases recorded it is safe to say that sixty-five per cent. have an able-bodied bread-winner, that is to say, 35,750 persons should be self-supporting, although now a burden on the community. As to medical charities, we are told that the applicants for relief at two leading hospitals and dispensaries are being investigated.

THE INTERNATIONAL CONGRESS OF 1887.—The action of the Committee of the American Medical Association in its relation to the International Medical Congress of 1887 has already been sufficiently condemned in these columns. On all sides it appears that the prospect of a successful meeting under the auspices of the existing committee are *nil*, and we once more repeat our prophecy that the Congress of 1887, meeting in America, must be totally given up.—*Medical Press and Circular*, November 4th.

CHILDBIRTH UNDER MESMERISM. — Dr. Edward Pritzel, of Vienna, reports the case (*Wiener Medizin Woch.*) of a young woman, aged twenty-six years, who entered the maternity hospital of Professor Braun. It was found that she was very susceptible to hypnotic influence, and when her labor came on, as it was slow and painful, she was hypnotized. While in this state of artificial anæsthesia the child was born, with no pain and with but slight loss of blood.

THE SUPPORT OF QUACKERY.—"Charlatanism," says Dr. Holmes, "always hobbles on two crutches—the tattle of women and the certificates of clergymen."

HOSPITAL SUNDAY.—The time is near at hand when the annual contributions for the hospitals will be solicited. Each private sectarian institution will be ready with its claim, and will strive to show how much it has done for the deserving poor. Offsetting this, it would be well on the part of prospective benefactors to ask for something beyond general statements. It would be worth while to inquire how economically these institutions are managed, how many of the deserving poor are treated, how many endowed beds there are, and how much medical charity is abused. Some of these institutions, which are too poor to attend to those patients they already have, are asking for increased accommodations.

THE AMERICAN JOURNAL OF OBSTETRICS AND DISEASES OF WOMEN AND CHILDREN.—With the beginning of the next year this journal discontinues the Department of Diseases of Children as a distinct feature of the *Journal*. Dr. George B. Fowler, who has edited this department with marked ability and success, ceases his connection with the *Journal*.

ANOTHER RESIGNATION FROM THE INTERNATIONAL MEDICAL CONGRESS.—Another of the Vice-Presidents of the Congress, Dr. R. Palmer Howard, Dean of the McGill Medical Faculty, has resigned.

SOME GOOD ADVICE.—"We looked hopefully to the action of the committee that met in Washington early in September for a harmonious and satisfactory solution of the honest differences between parties, but that committee was guilty of the most injudicious act that we would have supposed a body of intelligent gentlemen, intent on peace-making, could have planned. In its resolution to permit no change of a plan which was known to be unsatisfactory in its working, the committee exhibited a judgment that was "childish weak." The proper course to pursue—now that there seems to be so little reasonable hope of a successful settlement of differences between existing parties in time to inaugurate proper measures for the assembling of the Congress—seems to us to be the calling of a meeting of the American Medical Association in extraordinary session, rescind all resolutions relating to the Congress, except the one of invitation to meet in the United States in 1887, dismiss all committees that have been appointed, and declare as null and void all of their acts having reference to the Congress and then proceed *de novo*."—*Virginia Medical Traveller*

THE TWO-THOUSAND-DOLLAR PRIZE FOR A CURE FOR EPILEPSY.—The prize of eight thousand francs offered by the Belgian Academy of Medicine for an elucidation by clinical facts of the "pathogenesis and treatment of diseases of the nervous centres, and principally of epilepsy," has not been awarded; but a sum of five hundred francs is offered by way of encouragement to the author of the essay bearing the motto, "Traditionem pondero, doctrinam respicio, sequor veritatem," on condition that he allow his essay to be printed in an abridged form with the criticisms of the Commission.

MONUMENT IN BULGARIA TO RUSSIAN MEDICAL OFFICERS.—The last number of the *Ruskaya Meditsina*, says the *Lancet*, gives an engraving of a handsome monument recently erected in Sofia, Bulgaria, to the memory of 531 medical officers who fell in the Russo-Turkish War, 1877-78. It was planned by an Italian architect, and consists of a pyramid of rough blocks, on each of which are engraved the names of three or four of the deceased. The whole is surmounted by a capital of hewn stone, on the four sides of which are engraved the names of the chief battles in the campaign. A similar monument is to be erected in the Caucasus.

MEDICAL MISSIONARIES.—There was a medical students' missionary conference in the hall of the Young Men's Christian Association Building last Sunday, under the auspices of the Medical Students' Committee of the Association. Mr. L. D. Wishard, the American College Secretary, presided. Its object was to exhibit the field of labor for medical missionaries, as distinct from that for clerical missionaries, in heathen lands, especially China, India, and Western Asia. The Rev. Dr. Hopper, of Canton, China, said that the scheme was not a new one, as there are now eighteen hospitals and twenty-four dispensaries in China, which have been founded by medical missionaries, the oldest of which was established in

Canton in 1835. He gave instances of excellent work done by missionary physicians which had opened the way for the labors of their clerical associates. A number of addresses were made by other clergymen, and by Drs. C. R. Agnew and Wm. H. Thomson, and by Dr. E. A. Sturges, a medical missionary of Siam.

THE MEDICAL AGE is one of the best exponents of American medical journalism, and we read its columns with interest and profit. Something, however, has of late gone wrong with its Latin editor. Perhaps the overstudy of medical cases has made him careless of his genitives; at any rate, we would respectfully correct his statement that "*Salus populus* may be *suprema lax*," and would suggest the dropping of a vowel in his announcement that college rivalry in Buffalo is a "*causus belli*" Our esteemed contemporary writes capital English, and after all it may be only the spirit of evil at the printing-office that spoils its Latin.

THE SHADY SIDE OF MEDICAL EDUCATION IN CALIFORNIA.—"A medical graduate" writes to a contemporary complaining of an article which recently appeared in the *News Letter* in regard to the methods of manufacturing medicos which prevails in this State. We pointed out that there were "five so-called medical colleges in San Francisco and Oakland that we knew of, besides others that work in the dark that we were not acquainted with, that sell diplomas for coin." It was a monstrous system of quack-manufacturing which the *News Letter* hammered away at for two years before it could get the righteousness of its criticisms admitted. We insisted that students should evidence, by a matriculation examination, that they possessed sufficient scholastic education to read the language of medical science understandingly. We furthermore pointed out that the period of study should be at least doubled. Four years is the least time in which a medical student can be expected to attain to even mediocrity in the knowledge of his profession. California lacks hospital facilities necessary to the thorough education of skilful physicians; it also lacks experienced teachers with spare time to enable them to do full justice to their classes. A Californian medical diploma is not at present an evidence of professional attainments that inspires confidence in the public, or causes its holder to feel proud of its possession. We regret to say these things, but it is our respect for the noble art of healing which makes us say them. We regard the medical profession as the grandest on earth, and it is our sincere desire to exalt it which impels us to protest against local methods of manufacturing quacks. —*San Francisco News Letter.*

AS IT LOOKS AT ST. PETERSBURG.—Some complaints have been made that the real condition of the affairs of the next International Medical Congress has not been correctly apprehended abroad. The following editorial note from the *St. Petersburg Medicinische Wochenschrift* of November 21st shows that matters are a little mixed in Russia, in this respect comparing favorably with Chicago. "The prospects of the next (Ninth) International Medical Congress, which was to meet in 1887 at Washington, have lately, in an unusual manner, been put in jeopardy. The original Organizing Committee, of which, as announced by us in previous communications, the well-known Surgeon-General of the U. S. Army was secretary-general, and to which the most distinguished American physicians belonged, has been retired. This was accomplished through the intrigues and hostility which developed at the last Annual Meeting in New Orleans. At this time, a new committee was appointed under the presidency of a Dr. Shoemaker (Philadelphia). This new organization committee contains but a few of the members of the previous committee, and is composed mostly of unknown and insignificant physicians, who inspire no confidence in their capacity for conducting the Congress. Under such circumstances, any co-operation from foreign countries can hardly be expected."

A CANADIAN VIEW OF THE INTERNATIONAL CONGRESS. —The prospects of the Washington Congress of 1887 do not appear to grow brighter, and the tone of the great medical weeklies of the eastern cities shows very plainly that there is still war between the adherents of the old and the new committees. It is a great misfortune that there does not seem to be any central executive of the Congress which could step in and say: Stop this unseemly quarrelling at once, or we shall go elsewhere! But apparently the meeting must take place in Washington or not at all. The latter alternative would be preferable if a reconciliation is not effected; for, if matters remain as they are, it will be impossible to organize the sections with men of sufficient reputation to command success. To attract the workers of other countries the sections must be controlled by the men most eminent in their respective departments, but the present officers of sections, with few exceptions, do not reach beyond a respectable mediocrity, and are men that we cannot regard as representative. If the executive cannot secure the return of the leaders in thought and work, and fails to engage their hearty co-operation, but one thing remains to be done, and in the interests of the profession of the United States, it should be done soon—give it up. Better no Congress than a prolongation of this unseemly strife.—*Canada Medical and Surgical Journal.*

SOME RECENT MALPRACTICE SUITS.—Another suit of a blackmailing character has been brought against Dr. E. Williams and partners, of Cincinnati, O. According to the *Cincinnati Medical News* the charge was that they had permitted a small scale of iron that had entered the eye of a boy to remain, by which he eventually became blind—the sound eye becoming affected through sympathy with the injured one, and losing the power of vision. It was proven on the trial that the boy had visited the office of Dr. Williams but twice, and then had ceased calling because he was informed that to preserve the sound eye and be saved from blindness he must consent to have the eye that had been destroyed removed from its socket, to which his parents would not consent. For several months, after declining the services of Dr. Williams and associates he spent his time in going the rounds of the specialists of diseases of the eye, putting his case in charge, at different times, of both regular and homœopathic physicians. Every ophthalmologist by whom he was treated informed him that the only way by which he could avoid becoming blind was to have the injured eye removed. Finally, after losing sight in both eyes, he brought suit. The medical testimony, we are

told, was uniformly in favor of Dr. Williams, but the jury disagreed.—The Boston correspondent of *The Northwestern Lancet* writes: "Dr. A., a reputable practitioner living in a New England city, attended Mr. B. for a fractured thigh. The case did well, and the patient recovered without deformity. No measurements were recorded by the attending surgeon, but he was able to swear that the result was to him perfectly satisfactory. A year or two later the patient entered suit against Dr. A. for malpractice, and exhibited a leg considerably shortened and deformed. A jury at once found a verdict for the plaintiff, and awarded damages in some $6,000 or $7,000, a sum which seriously crippled the physician. He devoted his energies thereafter to discovering what he believed to be a fraud, and finally obtained evidence that B. had, subsequently to his recovery under A.'s attendance, again fractured the same thigh while in the Adirondack wilderness, and had on that occasion had no surgical attendance whatever. The physician was able to recover his money, but was at the expense of his detectives' and lawyers' fees, to say nothing of years of anxiety and of damage to his professional reputation."—A suit is just now in progress against a prominent gynecologist of Boston, connected with a free hospital for women. The plaintiff charges that she was entered into the hospital under invitation of the physician, who "met her somewhere," and told her he could cure her if she would come into the hospital. She did so, she says, not dreaming of an operation, until one day she overheard the nurses talking in a way which excited her suspicion. She was told that no operation was contemplated, and was reassured. But one day she came to her consciousness from ether to find herself being sewed up. She further deposed to having been discharged from the hospital onto the sidewalk upon a winter's night when she had no place to go, a usual fashion of eleemosynary institutions. She claims from the physician who gave his time and skill, and the hospital which gave its bed, board, and nursing, all without expense to herself, $10,000 apiece.

New Polyclinic College Building in Philadelphia.—The new building for the Philadelphia Polyclinic College, on Broad Street, will soon be ready for its occupants. The attendance at the college by the students from all parts of the country has increased beyond the capacity of the present quarters at Thirteenth and Locust Streets. The new building will contain more hospital wards and private rooms for pay patients, and the dispensary service will be given more attention. The journal edited by the faculty will be doubled in size after the first of the year.

St. Louis Obstetrical Society.—At the annual meeting of the St. Louis Obstetrical and Gynecological Society, held on November 18th, the following officers were elected: President, Dr. W. M. McPheeters; Vice-President, Dr. Walter Coles; Recording Secretary, Dr. I. M. Scott; Corresponding Secretary, Dr. E. C. Gehrung; Treasurer, Dr. Chas. E. Briggs.

The late Mr. W. H. Vanderbilt.—At a special meeting of the Faculty of the College of Physicians and Surgeons, the Medical Department of Columbia College, in the City of New York, held on December 10, 1885, the following preamble and resolutions were unanimously adopted:

Whereas, By the death of William H. Vanderbilt there has been taken from the community a citizen from whose hands this college has received a splendid addition to its means of usefulness, be it

Resolved, That we offer hereby our tribute of mourning for the loss of a benefactor, whose services to the advancement of education has been great and enduring—as broad in scope as free in gift—and whose enlightened generosity will ever be held in grateful remembrance by ourselves and our successors.

Resolved, That we tender our heartfelt sympathy to the family of the deceased in their bereavement.

Resolved, That, as a token of respect, all exercises at this college be suspended on the day of the funeral, and that we attend the same in a body.

Resolved, That these resolutions be communicated to the family, and be duly published.

John G. Curtis, M.D.,
Secretary of the Faculty.

College of Physicians and Surgeons, Medical Department of Columbia College.—At a meeting of the Board of Trustees, held December 15, 1885, the following preamble and resolutions were unanimously adopted:

Whereas, By the death of Mr. William H. Vanderbilt the cause of medical education in this country has lost one of its first conspicuous benefactors; and, whereas it becomes the duty of the Trustees of the College of Physicians and Surgeons, which was the object of his sagacious benevolence, to express their deep sense of the debt due to his memory; therefore,

Resolved, That Mr. Vanderbilt's gift toward the advancement of medical knowledge reaches a higher mark in the intelligent disposition of wealth than has often been attained by public benefactors; for it recognizes science as the handmaid of humanity, and acknowledges the benefits of the healing art in controlling human misery and enhancing human happiness.

Resolved, That it is a source of profound regret to this board that Mr. Vanderbilt's life was not spared to witness the completion of the college building which his generous endowment projected, and which will become his most worthy and enduring monument.

Resolved, That these resolutions be inscribed upon the minutes of this board, and that a copy be sent to the family of the deceased, with the assurance of our respectful sympathy for them in their great affliction.

John C. Dalton, M.D., *President.*
George G. Wheelock, *Registrar.*

Another Cure for Cancer.—In a case of alleged epithelioma involving the facial bones, with extensive infiltration of the tissues, where an operation was not deemed desirable, Dr. Antonio, of Mazzara del Vallo Maggio, applied an ointment consisting of fifteen parts of resorcine to twenty parts of vaseline twice a day, with the result, it is said, of completely curing the disease; nothing remaining but a white scar a centimetre in diameter.—*British Medical Journal.*

Hydrastis in Dyspepsia.—Several correspondents in *The Lancet* have lauded hydrastis as a most useful drug in dyspepsia.

Reviews and Notices.

THE DISEASES OF SEDENTARY AND ADVANCED LIFE. A Work for Medical and Lay Readers. By J. MILNER FOTHERGILL, M.D., Physician to the City of London Hospital for Diseases of the Chest (Victoria Park), Late Assistant Physician to the West London Hospital; Hon. M.D., Rush College, Chicago; Foreign Associate Fellow of the Royal College of Physicians of Philadelphia. New York: D. Appleton & Co. 1885.

THIS work, as its sub-title indicates, is written in a popular style, and the employment of technical terms, not understood by the laity, is, as far as possible, avoided. But, unlike most books of its class, it contains much that even experienced practitioners will find of value, although they may not always be able to assent to all the author's conclusions. Many of the views here advanced will be found treated more fully in some of the writer's previous works, especially in his book on "Indigestion and Biliousness;" but there is also much that is new, and even what is old is presented in a new light, and will bear perusing a second time. The work is divided into three parts, treating respectively of early life, adult life, and advanced life. Part II., in which the troubles incident to enforced bodily inactivity during the period of adult life are discussed, is the one which possesses the greatest interest for the average reader. In it the clerk, the machinist, the governess, the invalid and her companion, the merchant, the accountant, the literary man, and schoolmasters and -mistresses, each have a chapter devoted to the peculiar mental and physical ailments which their occupation entails upon them, and containing suggestions as to how they can best avoid the dangers of their respective callings. There are other chapters on enforced idleness resulting from a broken leg, a sea voyage, weak heart, and the like, and on hemorrhoids, rheumatism, the change of life, and common ailments and abnormal conditions. Part III., deals with the aged and their infirmities, and contains many little hints and suggestions as to how the declining years of life may be rendered comfortable, and the diseases peculiar to this period may be made less burdensome. Those who are acquainted with Dr. Fothergill's pleasant manner of writing will need no assurance from us to believe that there is no task involved in reading this book. Its perusal will prove to be a pleasant recreation in an evening following a hard day of toil. The proof-reading does not seem to have been performed with any too great care, for in many places the punctuation marks are displaced in such a way as to mar the sense somewhat, and we have never before heard that there was a Royal College of Physicians of Philadelphia, as is stated on the title-page.

TRATADO PRÁCTICO DE LAS ENFERMEDADES DE LAS MUJERES, por el DOCTOR GAILLARD THOMAS. Segunda Edicion Española, corregida y aumentada con seis capítulos, ciento un grabados nuevos, multitud de notas de la última edicion inglesa, un prólogo y un apéndice terapéutico, por el DOCTOR JUAN GARCÍA PURON, ex-Médico-cirujano del Ejercito Mexicano. A Practical Treatise on the Diseases of Women, by Dr. Gaillard Thomas. Second Spanish Edition translated by Dr. Juan García Puron. New York: D. Appleton & Co. 1885.

THE first Spanish edition of this standard work of Thomas on the Diseases of Women was published in 1879, and it became at once so popular among the physicians of Central and South America that it was almost impossible to supply the demand for it. And even while the second edition was in press it was found necessary to send out a new impression of the first in response to the imperative orders for the book which would admit of no postponement. We need say nothing as to the work itself, for it is so well known and prized by all that any words of commendation would be superfluous. And it is a pleasure to find that the book has suffered little, if at all, by its change of dress. The translation is idiomatic, yet preserves, as far as is possible, the easy and pleasant style of the original, and the typographical execution leaves nothing to be desired. The notes of the translator are judicious and not too long, and add to the value of the book. In fine, our Spanish-American brethren are to be congratulated upon their good fortune in having had this invaluable work presented to them in their mother tongue.

THE PEDIGREE OF DISEASE; being Six Lectures on Temperament, Idiosyncrasy, and Diathesis, delivered in the Theatre of the Royal College of Surgeons in the Session of 1881. By JONATHAN HUTCHINSON, F.R.S., late Professor of Surgery and Pathology in the College; Emeritus Professor of Surgery in the London Hospital; President of the Ophthalmological Society, etc. New York: William Wood & Co. 1885.

MR. HUTCHINSON has given us in this book a really excellent *résumé* of all that is known of the subject, and presents it in such a way as to convince his readers that they have erred in their readiness to ignore the teachings of a past generation. Our fathers perhaps laid too great stress on temperament and diathesis, but we have been in danger of going too far in the opposite direction, and in our eager study of the pathology of diseases have in a measure lost sight of the individual peculiarities which modify their course. It was the desire to counteract this tendency that led the author to deliver these lectures, and afterward to publish them in book form. Apart from the importance of the subject, the easy style in which the lectures are written makes their perusal a pleasant recreation as well as a profitable employment, and we feel sure that no one who gets the book and reads it will regret having done so.

PRACTICAL HISTOLOGY AND PATHOLOGY. By HENEAGE GIBBES. Third Edition. Philadelphia: P. Blakiston, Son & Co. 1885.

THE directions in this manual for staining, preparing, and mounting tissues are given clearly and concisely, and the methods recommended are those which the author has found "the best, easiest, and cheapest." It is not evident, however, that these are presented in any better manner than has been done by American teachers of this subject. The directions relative to the kind of instruments, and the purchase of the same, with the exception of the microscope, relate to London dealers for the most part, and, therefore, are not useful to American students. This portion of the book might well have been revised with this in mind, and dealers in this country recommended.

POST-MORTEM EXAMINATIONS. With Special Reference to Medico-legal Practice. By PROFESSOR RUDOLPH VIRCHOW. Translated by T. P. SMITH, M.D. Philadelphia: P. Blakiston, Son & Co. 8vo, pp. 138. 1885.

THIS little book is written in a practical spirit, and contains a wealth of valuable information. No physician can afford to remain ignorant of the maxims pertaining to the technique of post-mortem examinations. In the first place, rare cases, presenting points of great interest from a pathological point of view, are liable to occur in the practice of any physician. It is an unfortunate fact that such valuable material often goes to waste, simply because the practitioner is unable to avail himself of the most approved methods of post-mortem research. Again, the practitioner is sometimes called to give legal testimony, the value of which is in part, or even wholly, contingent upon his ability to conduct a scientific autopsy. It will thus be seen that the *raison d'être*, of Dr. Virchow's book is well established both on theoretic and practical grounds.

Reports of Societies.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, December 3, 1885.

ABRAHAM JACOBI, M.D., PRESIDENT, IN THE CHAIR.

DR. MORRIS H. HENRY read an interesting review of the life of

LOUIS ELSBERG, M.D.,

in which he also took a glance at the advancement of our knowledge on diseases of the throat during the last thirty years.

The subject of his memoir was born at Iserlohn, Prussia, April 2, 1836; he graduated in medicine at the Jefferson Medical College, Philadelphia, in 1857. In 1861 he delivered a course of lectures at the University Medical College. The following year he established the first public clinic for diseases of the throat.

Dr. Henry then mentioned the varied contributions to medical literature made by Dr. Elsberg, and said that he "was the first, beyond any question, to demonstrate and teach in public, in this country, the use and value of the laryngoscope in diagnosis and treatment. He leaves many disciples among his former pupils who will continue the same course of investigations. The best work of his life, however—the work that inures most to his fellow-men—was the diffusion of his knowledge and experience in such a way that all practitioners might render good special service to their clients.

"During that period of excitement pending the discussion of 'the code question' Elsberg could not be otherwise than thoughtful and liberal. He was gentle in the expression of his opinions. He was intense in his convictions. He never faltered in the discharge of an obligation or duty when once assured of its correctness and the probability of its serving a good purpose. While he was registered—if I may use the term—as a 'new-code man,' and I on the other side of the question, there was, in reality, no difference whatever in the substance of our views. A calm discussion of the questions at issue proved us in unison. Might not more forbearance have prevented the strife that disorganized associations and dissevered friendships of a lifetime? A calm, retrospective review of the field of battle tells again the sad tale of 'what might have been' had wiser counsels prevailed. Elsberg shared the common feeling of all educated, thoughtful, honorable practitioners of medicine, that there should be no necessity for a code beyond that unwritten code of ethics that should govern the conduct of gentlemen in every sphere of life. He knew of, and fully appreciated, the difficulties of any enforcement of a statutory enactment or a professional mandate against persons devoid of honor and unworthy of fellowship in a liberal profession. He knew also that the attainment of this boon—a difficult one—could only be reached by the imperative demand of the profession at large that the mills should be stopped, and that there should be no more enlistments of ill-formed, improper persons to the ranks of our sacred calling. He knew also that you can neither teach nor enforce virtue by resolutions or text-books. He knew, Mr. President, as you and I know—no one better than yourself—that the enlightened men of this country, the class that have shed most lustre, that have attained most honorable distinction, whether now rated (by irresponsible and illiberal factions) as new or old code adherents, are of one accord. The admission of the necessity of a special code—it is useless to deny it—is virtually an admission that the rank and file of the profession in this land is inferior in moral integrity to that of all other countries. I, sir, am unwilling to admit of any basis for any such conclusions.

"From one of his people—descended of those born on Latin soil, the same that gave birth to the Disraelis, Montefiore, Jessel, Aguilar, and Castelar, brilliant in art, literature, law, statesmanship, and humanity, not less dazzling to science—we are indebted for the first account, by the use of the laryngoscope, of the action of the vocal cords during inspiration and vocalization, important observations on the production of sound in the larynx, and valuable reflections on the formation of the chest. The story of the investigations of Manuel Garcia, who published, in the year 1855, in the proceedings of the Royal Society of England, his physiological observations on the human voice, is too well known to you to call for further reference on this occasion.

"If the utility and value of a life be measured by the advantages which accrue from the love, devotion, and labors of those ever ready to sacrifice self in ministering to the ills of poor suffering humanity, surely no one will now deny a worthy site to the memory of our late friend and Fellow of this Academy."

A paper was read on

ORIGINAL DEDUCTIONS BASED ON A STUDY OF ONE HUNDRED CASES OF FRACTURE OF THE UPPER EXTREMITY, EXCLUDING THE HAND,

by DR. SAMUEL W. SMITH. (See page 673.)

DR. JOSEPH D. BRYANT said the lateness of the hour would permit of only a few remarks, which he would make regarding fracture of the clavicle. The cause of the deformity which occurred in this fracture had given rise to a great deal of discussion, some claiming that it is due to muscular contraction, others to failure of the clavicle to hold the shoulder in position, others to contraction of this or that group of muscles. In Dr. Bryant's opinion the deformity depended upon the fracture of the clavicle, and not upon muscular contraction resulting from it. He believed that the function of the clavicle is to hold the shoulder backward, upward, and outward, and whenever the clavicle is broken in such a position that the fragments can override each other, the shoulder then falls downward, forward, and inward. If the fracture should occur at the inner or outer third there would be little deformity, but if at the insertion of the trapezius and deltoid muscles on the one side, and of the sterno-cleido-mastoid and pectoralis major on the other, there would always be marked deformity. He could not agree with the author of the paper that contraction of the subclavius muscle had particularly to do with the production of the deformity; that is, it had not a predominating influence.

As to treatment, any apparatus which would meet the indication, that is, confine the fragments in position, would secure as good results as any other. He had used the adhesive plaster of Dr. Sayre frequently, and it met the indication. Dr. Moore's method also met the indication. The apparatus which Dr. Smith presented also met the indication so far as he was able to judge from a casual examination, and if it did meet the indication he should think it had advantages over the other two methods mentioned—not that it would produce better results, perhaps, but because the results were obtained with less discomfort to the patient. He thought well of it.

DR. A. C. POST said, with regard to the portion of the clavicle in which fracture takes place, that the most important distinctions were in those occurring on the inner side of the coraco-clavicular ligaments, those occurring between the coronoid and trapezoid ligaments, and those occurring on the outer side of the trapezoid ligament. When fracture took place in the inner three-fourths of the clavicle, there was usually some deformity; the clavicle was shortened, the shoulder falling, so that the outer fragment fell below the inner. When fracture took place between the conoid and trapezoid ligaments, both fragments being tilted by the ligaments binding them to the coracoid process, there was almost no deformity, and it was very difficult to make a diagnosis. Very little treatment was required other than rest and support of the arm

in a sling. When fracture occurred at the outer side of the trapezoid ligament there was considerable deformity, but of entirely a different character from that which existed after fracture on the inner side of the conoid ligament; the shoulder is thrown forward, and the short fragment is placed at nearly a right angle with the long fragment, and on nearly the same level; there is no falling.

DR. A. H. GOELET had improvised an apparatus from roller bandage, similar to that employed by Dr. Smith, in a case of fracture of the clavicle which was first treated after Dr. Sayre's method by adhesive plaster, which caused great annoyance. Dr. Smith's plan gave the patient complete comfort.

DR. SMITH, in closing the discussion, said he divided the clavicle into thirds, after the plan of Hamilton. If fracture should take place in the outer third the deformity would be less than in fracture at the inner third, but the former locality had been selected in only one of his cases.

DR. C. R. AGNEW offered the following resolution:

Resolved, That it is the opinion of the Academy of Medicine that any judicial action which in its effect discourages members of the medical profession in making early reports to the Board of Health of cases of supposed contagious or infectious disease is contrary to public policy and most detrimental to the interests of public health. Carried unanimously.

Correspondence.

OUR LONDON LETTER.

(From our Special Correspondent.)

ROYAL MEDICAL AND CHIRURGICAL SOCIETY—ANTHRAX AND THE DISTRIBUTION OF THE BACILLUS ANTHRACIS IN THE HUMAN SKIN—TUBERCLE OR ACTINOMYCOSIS—THE MEDICAL SOCIETY OF LONDON—ACUTE TRAUMATIC MALIGNANCY—THE COLLEGE OF SURGEONS—THE GENERAL ELECTION AND MEDICAL CANDIDATES—THE HOSPITAL SUNDAY FUND AND RELIGIOUS INTOLERANCE—GASTRIC ULCER AND ITS TREATMENT—GASTROSTOMY AND JEJUNOSTOMY—MEDICAL MEN IN PARLIAMENT—THE MOVEMENT FOR ESTABLISHING A TEACHING UNIVERSITY.

LONDON, November 27, 1885.

THE last meeting of the "Medical and Chirurgical" was more scientific than interesting. The subjects discussed were rather abstruse, and could only be expected to interest a small section of the Fellows. The papers read were, however, pretty fully discussed.

The first paper was by Mr. A. E. J. Barker, Assistant Surgeon to University College Hospital and well known as the translator of Frey's Histology. Mr. Barker narrated the history of a case of malignant pustule occurring in a young man. The growth, which was on the left side of the neck, was excised and the patient recovered. Mr. Barker had examined microscopically the parts removed, and had arrived at the conclusion that the organisms (bacilli anthracis) had a remarkable predisposition for the most superficial parts of the dermis and only penetrated into the deeper parts slowly and in relatively small numbers. He found enormous colonies spreading over the surface of the papillæ, causing vesiculation of the epidermis. He found only a few scattered baccilli in the bodies of the papillæ and in the deeper parts of the cutis. None were detected in the vessels of the skin. Under the eschar the active growth of the organisms appeared to have been arrested.

The next speaker was Mr. Davies-Colley, Surgeon to Guy's Hospital. Mr. Davies-Colley thought that Mr. Barker had exaggerated the local character of the disease. In his own experience, he said, the system rapidly became affected. He referred to the fact that bacilli had been found in the various secretions of the body, and within a short time of the development of the local disease. Mr. Davies-Colley subsequently stated, in reply to a question from Mr. Barker, that the only case in which the bacilli were detected in the various secretions recovered. This fact seems to throw some doubt on the accuracy of the diagnosis.

Dr. Turner, Assistant Physician to the London Hospital, followed, and to a large extent concurred with Mr. Barker as to the marked localization of the affection. A line, he said, could be distinguished across the section above which the bacilli were numerous, and the tissues in a state of necrosis. Below this line the bacilli were few in number and the tissues still living.

The next proceeding in the programme for the evening was the reading of a paper on a case of liver-disease by Dr. John Harley, Physician to St. Thomas' Hospital. An hepatic abscess had formed and had been incised. Small quantities of thick, creamy pus were constantly discharged, and the patient finally died of exhaustion. There was only slight pyrexia throughout. The patient presented the usual aspect of tubercle. At the post-mortem several morbid masses were found in the liver. From the morbid anatomy of these masses, Dr. Harley endeavored to show that the case in question was one of tubercle, although he admitted that they exhibited very distinctly the character of actinomycosis. His contention, in fact, was that most, if not all, of the cases which have been regarded as examples of actinomycosis have really been cases of tubercle.

Dr. Harley's paper was very elaborate, and was evidently intended to carry conviction to the minds of his hearers. Nevertheless it failed to do so, and when his paper was concluded a general onslaught was made upon him. The speakers were Dr. Seymour Sharkey, Dr. Theodore Acland, Mr. Shattock, Dr. Percy Kidd, and Mr. Watson Cheyne. The general opinion seemed to be in favor of the distinct existence of actinomycosis, and several of the speakers considered Dr. Harley's case to be really an example of that disease.

At the last meeting of the Medical Society of London the entire evening was devoted to the discussion of the subject of "Acute Traumatic Malignancy." The discussion was introduced by the reading of a paper by Mr. Pearce Gould, Assistant Surgeon to University College Hospital, and Surgeon to the London Temperance Hospital, on a case in which sarcomata rapidly followed injury, and in which he amputated at the hip-joint. A very lively and interesting discussion followed. Many of the speakers narrated cases bearing on the subject discussed, and the opinions expressed in the course of the discussion showed pretty plainly that the condition termed acute traumatic malignancy has now received wide and general recognition.

Since my last letter the Council of the Royal College of Surgeons have held another meeting, at which the minutes of the previous one were confirmed. The Council are determined to resist reform *à l'outrance*. Whether twenty-four men can in the end succeed in thwarting the declared wishes of nearly seventeen thousand remains to be seen. I trow not—at any rate not for long.

By the time this appears in your columns the general election will be over and its results known. Just now it is overshadowing in interest all other subjects—both professional and general. There are but few medical candidates for Parliament. Mr. Ernest Hart has just been defeated in East London. Mr. Erichsen is believed to stand a good chance for the Universities of Edinburgh and St. Andrews. The new House of Commons, however, is not expected to contain many new medical members. The profession will probably be represented by at most a dozen members. Politics, as such, does not have many charms for most of our profession. A political life necessitates retirement from practice—it might almost be said, retirement from the profession. Such is not the case with the law, and many successful barristers continue to practise their profession while retaining a seat in the House. Moreover, in the law there are some

very substantial rewards for the barrister who becomes a successful M.P. The law officers of the Crown are chosen from among them. No such prizes as these even —to say nothing of the post of Lord Chancellor—await the physician or surgeon who forsakes physic to embark on the troubled sea of politics.

London, December 5, 1885.

The dispute which has been going on in the Council of the Hospital Sunday Fund, with reference to the alleged religious intolerance as regards the nurses at University College Hospital, has suddenly terminated in an amicable manner. As already mentioned in a previous letter, the controversy originated in the refusal of the authorities of University College Hospital to admit a Nonconformist to be trained as a nurse in their institution. It transpired, on inquiry, that the nursing at University College Hospital is entirely entrusted to a nursing "sisterhood" of marked High-Church principles. Hence the refusal. The matter was brought before the Council of the Hospital Sunday Fund by a prominent Nonconformist minister (Dr. Allon) and threatened to have serious consequences, as it appeared not improbable that Nonconformists might decline to contribute in future to the fund. The result would, of course, have been a serious loss. The question was referred for consideration to the General Purposes Committee. They have just brought their report before the Council. They virtually state that they cannot interfere, on the ground that "matters relating to the internal administration of hospitals are beyond the jurisdiction of the Hospital Sunday Fund." The adoption of this report was moved, and Dr. Allon seconded the motion, thereby withdrawing his opposition. The motion was carried unanimously, and an incident which promised to lead to serious results has thus terminated peaceably. The publicity which the affair has caused will doubtless lead to a reform in the arrangements at University College Hospital. The Hospital Sunday Fund continues to prosper. The receipts for the present year exceed thirty-four thousand pounds. The working expenses have been between eleven and twelve hundred pounds.

The last meeting of the Medical Society of London was entirely devoted to the consideration of the subject of ulcer of the stomach. The discussion was introduced by the reading of a paper by Dr. Stephen Mackenzie. Numerous remedial agents were recommended by the various speakers. Mr. Edmund Owen made the apt remark that physicians might learn something from surgeons. In his opinion uninterrupted rest was as necessary for a gastric ulcer as for an inflamed joint. "Mashed potatoes and pills" he characterized as "bad treatment."

At the Clinical Society's last meeting several interesting cases of gastrostomy were brought forward. This operation has now been performed a considerable number of times by British surgeons, and the proportion of successful cases is growing larger.

Mr. Golding-Bird then narrated the history of a remarkable case in which he had performed jejunostomy. The patient was a man, aged forty-six, who was admitted into Guy's Hospital after having suffered from symptoms of pyloric obstruction for ten months. A tumor could be felt near the pylorus. There was extreme emaciation, due partly to actual inability to retain the food ingested, and partly to the patient voluntarily starving himself to escape the pain which ensued on eating. After three weeks of medical treatment he was transferred to the surgical wards.

The patient having consented to an operation, Mr. Golding-Bird cut down on the pylorus with the intention of performing pylorectomy in Billroth's manner, but was disappointed by finding the tumor adherent to the liver. He therefore resolved to abandon the radical operation he had projected, but to convert it into a palliative one by opening the jejunum. The jejunum was seized and attached to the edges of the wound. On the third day after the operation the bowel was opened, and from that date the patient was fed solely through the jejunal opening. All went well until the ninth day, when some food was unfortunately allowed to pass into the peritoneum, and the patient died in twelve hours. During the week he was fed *per jejunum* the curious observation was made that when the meal was as much as a pint it was followed by severe indigestion, while one of only ten ounces caused no inconvenience. From this Mr. Golding-Bird suggested that possibly some cases of indigestion are due to the pylorus allowing a too free passage of chyme rather than to disturbance of the gastric or pancreatic secretions.

Only a dozen medical men have found seats in the new Parliament, and of these quite one-third, although qualified medical men, are not such by profession, having engaged in other pursuits. For instance, Dr. Vanderbyl forsook medicine for banking twenty-seven years ago. A few elections still remain to be decided, but the representation of the profession is not likely to be much increased.

The Association for Promoting a Teaching University for London have just held a general meeting. No decided move has yet been made. The Association labors under the fatal mistake of not being able to make up its own mind. It is at present wavering between three alternatives, viz.: 1. To endeavor to procure the reconstruction of the present University. 2. To institute a Teaching University, which shall exist side by side with the present one, and be in close relation with it. 3. To found a new and totally independent University, with which existing teaching institutions will be associated. The relative favor apparently accorded to these several schemes by the Association is indicated by the order in which I have given them. The reverse order would, however, better indicate the *practicability* of each. It is largely believed that any great change in the present University is not to be expected. The second scheme is almost as chimerical. The last scheme would, however, command great support, both pecuniarily and otherwise.

ON THE REPORT OF THE COMMITTEE ON DISINFECTANTS OF THE PUBLIC HEALTH ASSOCIATION.

A Reply to Dr. Sternberg.

To the Editor of The Medical Record.

Sir: It is with considerable hesitancy, and contrary to my previous determination, that I prolong, even by a short note, the unfortunate discussion that I have been led into by Dr. Sternberg. I know very well that nothing is gained by bringing personal matters before the public, but it is not easy to treat with deserved contempt accusations that are, and can be shown to be, absolutely false. Without taking up space with further apologies, I wish to close the discussion (so far as I am concerned) with the following brief comments on Dr. Sternberg's last article:

1. No better evidence can be had that Dr. Sternberg's idea is to distract attention from the mistakes of the report by making the discussion purely personal, than that in his last reply he pays no attention whatever to the principal point under discussion, viz.: the use of potassium permanganate as a coloring agent, and his attempt to get it out of the solution by adding chloride of lime.

2. Although he now claims that my experiments made with him, on Squibb's liq. zinci chlor., had no bearing on his own, at the time he specially quoted them as sustaining his previous determination (*Medical News*, January 18, 1885, p. 33). Even if we take his own statement as correct, it strikes me that experiments on the unknown contents of stray bottles should not be published as a guide to the profession in sanitary matters.

3. In order to acquit myself of the charge of reporting

a private conversation that I overheard, I am compelled to give the following particulars, which otherwise I would much prefer to leave unnoticed. The agreement Dr. Sternberg requested Dr. Abbott to make was *not* that he should remain with him for a year, but "that he would not accept of a position from Dr. John S. Billings if it was offered him, as that gentleman was desirous of securing an assistant familiar with his methods of work." Moreover, I did not overhear the conversation, but Mr. Lee, of the Biological Laboratory of the Johns Hopkins University, and myself were present, and were asked by Dr. Sternberg to witness the verbal agreement.

Now, I do not simply place my own word in opposition to Dr. Sternberg's in this matter, but refer to Dr. Abbott and Mr. Lee for the confirmation of these facts. There is certainly no reason why these gentlemen should be prejudiced in my favor, and if they will say that I have in any way incorrectly reported the conversation, I am ready to forfeit the entire confidence and respect of the profession.

Dr. Sternberg has done too much good bacteriological work for me to say anything that affects his reputation, except in so far as he has made it necessary for me to preserve my own; and, to avoid further unpleasant complications of this kind, I will take no further notice of any statements except such as pertain solely to the points of the report mentioned in the article by Mr. McClintock and myself. J. R. DUGGAN, M.D.

JOHNS HOPKINS UNIVERSITY, December 12, 1885.

EQUINE SCARLATINAL VIRUS AS A PROPHYLACTIC AGAINST HUMAN SCARLATINA.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR: Since the publication of my first article on the use of "Equine Scarlatinal Virus as a Prophylactic against Human Scarlatina" (MEDICAL RECORD, March 24, 1883), I have carefully considered the statements made at that time, and I am led to say they were untruthful, for I do not believe the injection of the equine virus into the subcutaneous tissue of the rabbits and dog, produced a "confluent eruption" similar to scarlatinal rash. I also believe that the "furfuraceous exfoliation" and the enlargement of the lymphatics could be accounted for by the slight traumatic inflammation.

The injection of the virus under the skin of the twelve patients reported produced a redness, but I am inclined to think, as a result of more recent trial, that it was not a scarlatinal eruption. With reference to the injection of the human scarlatinal blood I can only say that if it contained the active poison of scarlet fever it certainly failed to reproduce the disease, and that might be evidence in favor of the protective power of the equine virus, but I am disposed to believe that the blood was inert. I take it that in scientific investigations it is only honest and true to frankly acknowledge error in the interpretation of phenomena, carelessness as to detail, or mistakes in deductions. I am aware that conscience is just as certain to condemn or approve in the domain of science as to set up a tribunal within a man, by which his own actions are judged in any other field of labor.

I am continuing the investigations I began two years ago, and I have reason to believe that, notwithstanding the apparent failure thus far, a satisfactory solution of the problem will be arrived at in due time.

Yours respectfully,
J. W. STICKLER, M.D.

SPONTANEOUS ORIGIN OF TYPHOID FEVER.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR: I noticed some time ago, in THE MEDICAL RECORD, the discussion of this question in the New York Academy of Medicine, and have been expecting to hear from a good many physicians situated in sparsely settled portions of the country on this subject. I think physicians so situated should contribute such testimony as they may have on this subject, as it is impossible for those in large cities with a dense population and all their surroundings ever to decide this question. I would like to hear the experience of country physicians, to see how many have arrived at the same conclusion. I see, in THE MEDICAL RECORD of November 21st, Dr. Ambrook produces valuable testimony as to its spontaneous origin on the mountains and plains of Western Texas and Colorado. I have no doubt there are numerous other physicians similarly situated, whose testimony would be the same. Then, there are a still larger number not quite so favorably situated, it is true, yet sufficiently so to produce valid testimony on this question. I have been doing a country practice for nearly twenty-nine years, and, although typhoid fever has not been very prevalent in my neighborhood, I have had one or more cases almost every year, widely separated from each other and no communication between them, no antecedent case in the neighborhood, and no other case in the family or neighborhood followed those cases. This looks like strong evidence in favor of its spontaneous origin. It prevails sometimes in certain localities as an epidemic, just as dysentery, cerebro-spinal meningitis, and other diseases do; then it will be absent from those localities for five, ten, or fifteen years before it appears again. Then, in other neighborhoods, we only have a few sporadic cases, widely separated from each other, in families who have remained at home, and have not seen any one who has even been with a case of typhoid fever.

J. G. KNOX, A.B., M.D.

Army and Navy News.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department, United States Army, from December 6, 1885, to December 12, 1885.

BIRMINGHAM, H. P., First Lieutenant and Assistant Surgeon. Ordered for duty at Camp Grant, Riverside Park, New York City. S. O. 256, Department of the East, December 4, 1885.

BUSHNELL, GEO. E., First Lieutenant and Assistant Surgeon. Ordered for duty as Post Surgeon, Fort Preble, Me. S. O. 256, Department of the East, December 4, 1885.

WILSON, WM. J., Captain and Assistant Surgeon. Ordered for duty as Post Surgeon, Plattsburg Barracks, N. Y. S. O. 256, Department of the East, December 4, 1885.

APPEL, D. M., Captain and Assistant Surgeon. Ordered for duty at Jackson Barracks, La. S. O. 256, Department of the East, December 4, 1885.

EVERTS, EDWARD, First Lieutenant and Assistant Surgeon. Ordered from Department of the Columbia to Department of Arizona. S. O. 279, A. G. O., December 5, 1885.

POLHEMUS, A. S., First Lieutenant and Assistant Surgeon. Relieved from duty at Presidio of San Francisco, Cal., and ordered for duty as Post Surgeon at Fort Halleck, Nev., relieving Acting Assistant Surgeon Loren N. Clark, United States Army. S. O. 113, Department of California, November 30, 1885.

Official List of Changes in the Medical Corps of the United States Navy for the week ending December 12, 1885.

LIPPINCOTT, GEORGE C., Passed Assistant Surgeon. Detached from Navy Yard, Washington, and to wait orders.

DEANE, C. W., Passed Assistant Surgeon. Ordered to the United States Receiving Ship Dale, as relief of Passed Assistant Surgeon G. P. Lumsden.

LUMSDEN, G. P., Passed Assistant Surgeon. Ordered to Naval Hospital, Washington.

LOVERING, P. A., Passed Assistant Surgeon. Detached from United States Receiving Ship Wabash, and to wait orders.

Medical Items.

CONTAGIOUS DISEASES—WEEKLY STATEMENT.—Report of cases and deaths from contagious diseases reported to the Sanitary Bureau, Health Department, for the week ending December 12, 1885:

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-spinal Meningitis.	Measles.	Diphtheria.	Small-pox.	Yellow Fever.
Cases.								
December 12, 1885	1	22	31	1	9	87	5	0
Deaths.								
December 12, 1885	0	5	3	1	3	44	1	0

BOWDICHIA MAJOR.—At a meeting of the Therapeutical Society of Paris M. Petit read a communication concerning a new alkaloid which he had abstracted from the bark of a shrub used in Brazil in the treatment of fevers and of rheumatic and gouty pains. This bark comes in hard, thick fragments of an ochre-yellow color, has a bitter taste, and resembles somewhat yellow cinchona bark. It is taken from a leguminous plant called Bowdichia major, and known by the natives under the name of sebipira guacu, or sucupira. The alkaloid is said to possess narcotic and mydriatic properties.—*Der Fortschritt.*

THE PRESERVATION OF SOLUTIONS FOR HYPODERMIC USE.—At the meeting of the French Association for the Advancement of Science, at Grenoble, M. Limousin explained the method used by him to prevent the decomposition of solutions intended for hypodermic use. He used little pearls of glass of a size sufficient to contain one dose, which were filled so as to exclude all air and then sealed by fusing the open end in the flame of a lamp. When the solution was wanted for use the end was broken with the fingers, and the needle of the syringe inserted through the opening thus made.

COLLECTIVE INVESTIGATION IN RUSSIA.—The Russian members of the Committee for Collective Investigation of Disease, appointed at the International Congress of Copenhagen, have begun their work. They publish a long circular in a recent number of the *Russkaya Medetsina*, setting forth the object of the Committee and explaining the method to be pursued. A list of questions is appended for the guidance of those willing to aid in the work. The first subject proposed for collective investigation is the etiology of rachitis. The members of the Committee are Rauchfuss, of St. Petersburg, and Runeberg, of Helsingfors.

FERRÁN'S LABORATORY.—A correspondent of the London *Times* writes that while Ferrán was in Valencia he used for his laboratory the kitchen of a new and as yet uninhabited house. In this kitchen there was a water-closet, placed against the inner wall as far as possible from the windows, and ventilated into the kitchen through an opening over the door. The house had just been built by a physician of Valencia, who apparently had as much sense of the fitness of things as he had knowledge of sanitary science. The writer adds that the closet was already so foul and choked up that he was unable to discover whether it trapped or not.

HOSPITALS AND THE GENERAL PRACTITIONER.—Speaking of the way in which hospitals take money from the profession, Dr. Hasket Derby says in the *Boston Medical and Surgical Journal:* "A case in point will show the practical working of this state of things, and I would call attention to the fact that what follows is a simple narrative of an actual occurrence. In a New England city, a surgeon eminent for his skill was consulted by a woman from the country, who had a tumor of the breast requiring removal. She was accompanied by her clergyman, who proceeded to make the necessary arrangements on her behalf for the operation. After some inquiry into the patient's circumstances, a fee was named that she declared herself quite able to pay. A boarding-house was engaged, and the day fixed upon. The two left the office, congratulating themselves on having obtained the desired professional skill on terms that met with no objection. Two days later the clergyman appeared alone. 'Doctor,' said he, 'I am come to tell you that we will not have you perform the operation. You are not, however, to infer that we doubt your skill, or are dissatisfied with your fee of $100; but Sister Blank has visited the So-and-So Hospital, and there learned that, by taking a room at $25 a week, she can have the operation performed for nothing. She can readily find other uses for the money she would have paid you, and feels it to be her duty to save the amount.'"

EFFECTIVE VACCINATION.—A London paper says that an apothecary of Thorndale had just received a fresh supply of vaccine points, and some of them happened to be exposed to view on his counter. A burly farmer from that neighborhood was in at the time and amused himself by using one of the points as a toothpick, pricking his gums in the operation. It "took" in the most approved style, and the man is now in possession of a mouth that is crowding all the other features of his face out of shape.

FOR SWEATING OF THE FEET.—Vieusse recommends frictions with subnitrate of bismuth in all forms of bromidrosis of the feet. In a few cases, he says, it seems to have no effect in diminishing the secretion, but it always removes the fetid odor.

THE CONTAGIOUSNESS OF TETANUS.—M. Laiger, in a paper read before the Société de Chirurgie of Paris, maintained that tetanus is contagious, and of an epidemic character. M. Ferrier considers that M. Laiger does not distinguish between veterinary and human medical science. Spontaneous tetanus among animals must be admitted. The facts in favor of the contagion of tetanus are often the outcome of careless clinical study. Rose and Billroth admit the contagion of tetanus, but all attempts to inoculate that disease, even those recently made by M. Nocard, have been unsuccessful.—*Brit. Med. Journal.*

THE VACCINE FROM REVACCINATED CHILDREN is of doubtful protective potency, according to the observations of M. Blot, recently reported to the *Academie de Médecine.*

CONNECTION BETWEEN AFFECTIONS OF THE EYE AND SPINAL CURVATURE.—A Polish physician, Dr. Jasinski, has traced a connection between errors of refraction and curvatures of the spine. In thirty-seven cases of curvature, he was able to prove with certainty the previous existence of these or other abnormal conditions in the eyes, such as insufficiency of the internal rectus, astigmatism, asthenopia, etc. Myopia alone, however, does not appear to cause curvature. Unequal vision and insufficiency of the internal recti seems to be most efficient in the production of spinal curvature. Spasm of the accommodation also is capable of producing it. Removal or relief of the eye affection is followed by improvement in the spinal curvature—a troublesome and obstinate class of cases in orthopædic practice.—*Lancet.*

UNION OF FRACTURES IN THE AGED.—Dr. O. N. Bradbury, of Paris Hill, Me., sends us an account of a case of fracture of the femur in a man aged eighty-eight, in which healing took place perfectly. Dr. Bradbury doubtless forgets that this is not unusual, since fractures often heal more quickly in the aged than during middle life. Mr. Erichsen recounts two cases where very perfect union of fractured femurs took place in patients over ninety years of age.

A Curious Monstrosity.—A child was born recently in Naples having a fifth limb, corresponding to the right lower extremity, growing from the region of the false ribs on the left side, near the sternum. There were well-developed male genital organs in the normal situation, and another set, complete in every respect, except that the testicles seemed to be wanting, on the inner side of the thigh of the supernumerary limb. The patellæ were absent, and a fold of skin prevented full extension of the leg. The skin and muscles of the abdominal wall were wanting in the umbilical region, so that the intestinal movements could be distinctly seen beneath the peritoneal covering. The pavilion of the left ear was also double. At last accounts this child was alive and in good health.

How a Doctor Got a Pass.—The pass question has its humorous side. A Chicago road derives some added traffic from a new cemetery started about a year ago, and lately received an application for a trip pass from a prominent physician, who based his request upon the ground that he had "worked up a good business for the graveyard." He got his pass.—*Omaha Republican.*

Microbes, Meteorology, and Disease.—According to the microbic statistics published by M. Miquel in *l'Annuaire du Bureau des Longitudes*, the bacteria dispersed in the atmosphere vary during the different seasons of the year. It is increased by north and east winds. At Montsouris, in a cubic metre of air, there are in winter, 260 bacteria; in spring, 495; in summer, 650; in autumn, 480; giving an annual average of 471. In January, there were 1,830; February, 1,700; March, 3,300; April, 4,330; May, 4,380; October, 3,910; November, 2,760; December, 1,800; throughout the twelvemonth, a monthly average of 3,480. In this part of Paris, the air is comparatively pure. A similar analysis of the atmosphere in the Rue de Rivoli proved the monthly average, throughout the year 1881, to be 6,295; in 1882, 3,435; in 1883, 2,345; in 1884, 1,836. Thus, during the last four years, the average has diminished. At the same time, the mortality from zymotic diseases has been less, although the population of Paris annually increases at the rate of 29 per 1,000. The deaths from typhoid fever, small-pox, scarlet fever, whooping-cough, diphtheria, dysentery, erysipelas, puerperal infection, and infantile enteritis, were, in 1880, 14,080; in 1881, 13,104; in 1882, 13,613; in 1883, 11,598; in 1884, 11,520; giving a decrease in mortality of 18 per 100. In thickly-populated districts, the proportion of microbes in the air is much larger. Sea-side towns, and those situated among mountains, are the freest from bacteria; a closely-packed population aids to engender and develop these organisms. Berne, although the mountain air constantly sweeps through its atmosphere, is by no means free from the presence of bacteria. According to Freudenreich's researches, the monthly average is 580, four times as pure as the air of Paris (2,020), but inferior to that of Montsouris (420). M. Miquel analyzed the air of a room in an old house in the Rue Monge. The analysis was made in the morning, before any door or windows had been opened. In winter, a cubic metre of air contained 45,000 bacteria; in spring, 26,600. The increased proportion in winter is in consequence of not opening the windows so much as in summer. In the wards of the Hôpital de la Pitié, which are ventilated, there are 92,960 bacteria to a cubic metre in winter, and 54,110 in spring. In a new house in the Rue Monge, a cubic metre of air contained, in winter, 3,120 bacteria; in spring, 3,660; in summer, 4,560. The proportion varies according to the hours of day; from twelve to one o'clock, there are 62 bacteria per cubic metre; from two to three o'clock, 102; from three to four, 130; from four to five, 128; from six to seven, 148. The largest proportion occurs at sunset and sunrise. The following gives an idea of the relative purity of different atmospheres: ocean air, 0.6 bacteria per cubic metre; mountain heights, 1; the saloons of vessels, 60; the top of the Pantheon, 200; Park Montsouris (the average of five years), 480; at Berne, 580; Rue de Rivoli, Paris, 3,480; new houses at Paris, 4,500; Paris sewers, 6,000; the laboratory at Montsouris, 7,420; old houses, 36,000; the new Hôtel-Dieu, 40,000; the Hôpital de la Pitié, 79,000.

Yellow Fever Inoculation.—Drs. Rabourgeon and Freire, of Rio de Janeiro, have recently practised inoculation of yellow fever on a number of medical students and over two hundred porters and laborers. Soon after the inoculation symptoms of yellow fever in a mild form appeared and passed away again in two days. None of the inoculated fell a prey to the disease, while many of their unprotected comrades were attacked by the disease and died. Many also of the European ship-captains and sailors on vessels in port were inoculated and remained free from the disease.

Removing the Sisters from the Paris Hospitals.—In an address recently delivered at the Commencement exercises of the École Municipale de la Salpêtrière, M. Bourneville said that eight of the Paris hospitals had been taken from the hands of the religious communities during the past eight years. There remained twelve institutions not yet attacked, which were served by 246 Sisters, and these, the speaker urged, should be at once put under the charge of lay nurses. At the same time, however, he admitted that there was a lack of properly educated lay nurses for the hospitals already in their hands. He said also that the authorities of these institutions knew so little about the management of the sick that they always put ignorant and incompetent nurses on the night service, just at the time when exigencies demanding experience and intelligence to meet them were the most likely to arise. Dr. Bourneville seems to be one of those unfortunate advocates who are constantly bringing up arguments which tell against their own cause. He also made the remarkable assertion that all the hospitals in the United States were in the hands of lay nurses. In view of the result of the recent elections in France, the present would hardly seem to be the most fitting time to renew the agitation against the Sisters of Charity, looking at it merely as a measure of political wisdom.

Diphtheria Statistics.—During the year 1884 there were 705 cases of diphtheria treated in the Hospital Trousseau. Of these 385 died, and 320, or 45.5 per cent., recovered. The mortality of these patients, upon whom tracheotomy was performed, was 73.2 per cent.

Honors for Brown-Séquard.—At the annual public session of the French Institute, held on October 24th, the president, M. Bouguereau, announced that the biennial prize of the institute had been awarded to M. Brown-Séquard. It was a pleasure, he said, to reward the labors of this indefatigable experimenter, and to recognize his work in a branch of science the great aim of which was to relieve human suffering.

Electricity and Dust.—From the *Popular Science News*, November, 1885, we take the following: "Electricity may yet be of important service as a sanitary agent. It is only within a short time that the discovery has been made that a discharge of electric sparks through a dusty atmosphere will cause the dust to settle, and already the fact is beginning to yield results of practical value. In the experiments to which we have referred, a continuous series of sparks were sent through a bell-jar filled with magnesium smoke, and in a very short time the air in the jar was cleared; similarly, when the jar was filled with steam, electrification caused the globules to aggregate into mist and fine rain, which rapidly fell. It soon occurred to a lead-smelter in Wales that, if electricity could do so much in a laboratory experiment, it might be made to do something useful on a large scale. In lead-smelting works the greatest difficulty is to deal in

a satisfactory manner with the lead-fume, or the volatilized lead which passes off from the furnaces. Long condensing flues and chambers are employed; but even with the best arrangements a good deal of lead escapes to poison the atmosphere, and to the loss of the manufacturers. In an English establishment an experiment has been made in the use of electricity for 'settling' the noxious dust. A large wooden flue was constructed out of casks, and fitted with windows at opposite points throughout its length, so that the 'fume' could be readily examined as it passed along. The experimental flue was fitted with dampers in such a manner that it could be filled with the fumes and closed at both ends, or could be used as a branch or loop in the main flues. The electrical machine had one pole connected to the ground, and the other to an arrangement of metallic points placed inside the flue; a stout brass rod, encircled by a glass tube to insulate it, being carried through the top of the flue, and held in the position desired for the discharging-points. A well-insulated copper wire connected this brass rod with the pole of the machine, which, being kept warm and dry in a shed, gave sparks in all weathers of about four inches in length. Various experiments proved that within certain limits, determined by the size of the electrical machine, the more points of discharge, the greater or more rapid the effect produced. The first experiments were made upon the 'fume' in a stagnant state, by filling the experimental flue with the gases from the main, and closing the dampers at each end. Viewed through the windows, the fume had the appearance of a dense fog; but the moment the electric discharge commenced, a whirling movement was observed round the points, and in a very few seconds the foggy matter collected into flakes, which were rapidly deposited on the sides and door of the chamber, and the atmosphere became clear. When the fume was permitted to pass through the temporary flue, with the rapid motion due to the pressure of the furnace gases, no change was witnessed as it passed the windows; but at the outlet it was found that the foggy matter had been agglomerated into flakes, which in calm weather fell to the ground immediately on escaping from the flue. In this case the pressure forced the fume on too rapidly to allow of the effects of the electric discharge being witnessed through the windows; but it was, nevertheless, deemed satisfactory, and the owner of the works determined to adopt the method of attacking the fume by the electrical method.

Gerhardt's Plumbum Causticum.—According to the report of the Medical Society of Würzburg, the best means of removing condylomata is the so-called "plumbum causticum" used by Gerhardt in the Würzburg syphilitic clinic, and which is composed of oxide of lead and potash. This does not penetrate deeply into the tissue, but produces a blackish slough where it is applied. It can, however, be made to destroy a condyloma in a single sitting. It is very useful for warts on the glans penis and vagina, but is not suitable for papillomata of considerable size, which must be subjected to operation.

Strychnine to Prevent Flooding.—Dr. A. Walker writes to the *British Medical Journal*: "In a number of cases, strychnine administered along with iron for a month before labor, has exerted a remarkable influence in preventing *post partum* hemorrhage, where severe flooding has occurred in previous labors."

Scenes at a Free Dispensary.—"The ingenuity," says Dr. H. Derby, in the *Boston Medical and Surgical Journal*, "of those who seek to disguise their resources must have been experienced to be credited. We were once surprised by a handsome legacy from the estate of an old lady, who had for weeks enjoyed the hospitality of the infirmary, and there been relieved of a cataract; an excellent thing for the institution itself, but not calculated to raise the spirits of the surgeon originally in charge of the case. Another free patient, treated for the same disease, was afterward discovered to have been the mayor of a New England town, and a large real-estate owner there at the time of the operation. 'I prefer to see you at your office, Doctor,' said a young man to me once, 'as I get more of your time. But I suppose I might go to the infirmary, as uncle does.' 'Is your uncle a very poor man?' I asked. 'O, Uncle owns a factory.' 'But how does he manage to pass at the infirmary?' 'Uncle's sly,' said the youth, with an exquisite enjoyment of the fact; 'he puts on old clothes and dirties his hands every time he comes down.' A well-known lawyer of this city once emerged from the waiting-room, and sat down in the patient's chair. On being remonstrated with for attempting to impose himself on a charity, he coolly informed me that all he wanted was an examination and opinion, having obtained which he proposed to place himself under private treatment outside. He had evidently thought he would escape recognition. A well-to-do merchant, being similarly detected, informed us that he had been a tax-payer for forty years, and demanded treatment as a right. Finally, one day, a very respectable and well-dressed lady from New Hampshire presented herself for treatment, and disclaiming poverty, was refused an examination. The next patient, evidently in good circumstances, hailed from the same place. So did the four succeeding, all unfit cases for relief. At last it transpired that we were dealing with the members of a cheap excursion, where one of the attractions offered by the enterprising agent had been a free call at the Eye Infirmary."

The Opium Habit in Temperance Towns.—Dr. R. C. Downey, of Caldwell, O., writes us that he has been much astonished at the large sales of opium and morphine in small towns. He lives in a place of 1,500 inhabitants. He writes: "I called at one of our two drug stores for a drachm of morphine. The druggist said he was out of it. I asked, 'What has become of the large amount you had only a few days ago.' He replied that his regular customers had taken it all. He declined to tell me who they were, but said he had one customer who bought it by the ounce." Dr. Downey thinks that he has obtained facts which show that opium-eating is more common in temperance towns and communities than in those in which the liberal use of alcoholic drinks is allowed.

Arsenical Wall-papers Utilized.—Mr. Matthieu Williams has suggested that the arsenical wall-papers, which are generally regarded as detrimental to health in ordinary localities, may be useful as a protection against the dangers of regions subject to malaria. In a recent number of the *Gentleman's Magazine* he says: "I maintain that the hotels in the vicinity of the Campagna, the Pontine Marshes, the Maremma, and other malarious regions of Italy, should be papered throughout with brilliant green arsenical papers, and painted with Scheele's green or other arsenical pigment. The same should be done in New Orleans and all other such places, for the special benefit of non-acclimatized visitors."

Throat "Comforts."—The following is taken from Davis on the Voice, and is given to show the peculiarities of some singers in their attempt to give a finishing touch to improve the quality of the voice. With many who follow the stage but little judgment is exercised in the selection of "throat helps," as the following quotations prove: "Southeim takes a pinch of snuff and a glass of lemonade between acts. Niemann sips champagne. Tichatcheck washes his throat with mulled claret. Ferenczy, the tenor, smokes a few cigars. Braun Brini drinks a glass of beer at the conclusion of the first act; after the second act, a little moistened bread; after the third and fourth acts drinks *café au lait;* and when she is going to sing the great duet in the fourth act of

'The Huguenots,' as goddess of the art of song, she demands a bottle of Moet Rose as a libation. Cruvelli takes a mixture of claret and champagne. Nilsson takes a glass of beer. Madame Borghi Mamo is lost without a pinch of snuff. Malibran used to take supper in her box about half an hour before coming on the stage. She ate mutton cutlets in the costume of *Desdemona*, and almost invariably washed them down with half a bottle of sauterne. This was generally followed by smoking a cigarette, which was only tossed aside just before her appearance on the stage. These 'fancies' are not recommended. The opinion of most voice-users that I have met is that those who employed them could sing and speak well in spite of the bad effects of these 'congesting' agencies. The course pursued by the following singers and speakers is recommended: Labatt, the Swedish tenor, is in the habit of eating a couple of salted cucumbers before appearing on the stage. He looks upon this as a strengthening remedy for the voice. Wachtel, the tenor, takes an egg beaten up with a little sugar. He considers that this softens the voice, and is, no doubt, very good. Madame Sonntag used to take sardines between acts. Madame Desparee soothes her throat with plain warm water. Madame Cabel eats pears. Adelina Patti prefers a bottle of seltzer water. Ugaldi has a preference for plums. Trevelli Bettini eats strawberries. One of my patients, a noted star actor, takes a cup of warm coffee with cream and sugar, and a warm boiled potato with a little salt, between acts. The following is the experience of an old amateur of New York City: 'It appears rational to avoid anything before singing that would tend to irritate the throat.'"

A Strong Argument in Favor of Vaccination.—Dr. W. T. Clute, of Schenectady, N. Y., sends the following interesting item: "Having read an editorial in the issue of The Medical Record for November 21, 1885, title, 'A Strong Argument in Favor of Vaccination,' allow me to add another case to the list in support of the argument. My own mother, now in her fifty-sixth year, had the small-pox while an infant in arms. Last September she allowed me to vaccinate her, just to see if it would take. To the surprise of both of us, it took and ran through a typical course. The vaccine used was a fresh bovine ivory point. It must have been nearly fifty-five years ago since she had the small-pox. She always expressed herself as ready and willing to attend any of her friends should they be unfortunate enough to be smitten with the small-pox, feeling sure that she was safe from an attack. She now thinks she would have taken the disease a second time, and that the vaccination will give her even better protection than the small-pox itself."

Dr. D. J. Cain, Asheville, N. C., also writes on the same subject as follows: "In an editorial in the issue of The Medical Record, November 21st, you say: 'We have been somewhat surprised to find that vaccination "takes" with those who have had small-pox, two or three such cases having come under notice. . . . Moreover, that vaccination is a surer safeguard from small-pox than small-pox itself.' As bearing upon these statements, in confirmation of the one and partial disproof of the other, I relate the following case which came under my notice many years ago: In 1839 a girl about eighteen years of age, with confluent variola, was admitted to the Hôtel Dieu, Paris, in the service of M. Chomel. She passed safely through the disease, and when she was well it occurred to M. Chomel to test the receptivity of the system for vaccinia. He vaccinated her with humanized virus, which 'took' properly; the vesicle being of the primary form. She was then discharged. Three months later she was admitted to the same ward with a second attack of confluent variola. Through this she likewise passed safely. The susceptibility of this disease possessed by this woman is paralleled by that of the woman reported by Dr. Gregory, of Edinburgh, who had confluent small-pox *nine* times, and died in the ninth attack."

Eruptions Due to the Use of Certain Medicines.—Quinine: Erythema scarlatina; papular erythema (Kohner); hemorrhages and purpura; pemphigus, œdema, and prurigo. Cinchona, Belladonna, Stramonium, Strychnine, have the same characters as quinine. Digitalis: Erythema after long use (Traube). Aconite: Vesicular exanthemata. Santonine: Pemphigus, vesicles (Deschamps). Opium and Morphine: Erythema (Apolan); papular eruption, with marked desquamation and itching. Pilocarpine: Increased perspiration. Atropia: Diminished perspiration. Phosphorus: Purpura. Mercury (internally): Erythema (Kalus, Zaissi, Gamberini); eczema (Aley, Fournier, Gamberini). Arsenic: Erythema and papules (Imberts-Goubayre); vesicles and pustules (Bazin, Raymondi, Gamberini). Carbolic Acid: Erythema (Taourschi); pemphigus (Zaissi). Salicylic Acid: Purpura (Freudenburg); vesicular angina, pemphigus. Chloral: Erythema, slightly colored, itching, desquamation; purpura and petechia (Crichton and Brown); eczema (Kirn). Copaiba, Cubebs, Turpentine: Pemphigus, erythema, eczema (Renter). Cod-liver Oil: Acne. Iodide of Potassium: Papules, vesicles (Bumstead, Gamberini); pustules, ecthyma, eczema (Landrieux); ecchymoses and purpura (Tilbury Fox). Bromide of Potash: Papules and pustules, deep tubercles with ecchymoses, pemphigus, ulcers.—*Translated by Dr. C. E. Warren in College and Clinical Record.*

Treatment of Carcinoma of the Womb.—After scraping away as thoroughly as possible a medullary carcinoma from the cavity of the womb, Professor Parvin applied this caustic: ℞. Bromi, ʒ j.; Acid. carbolici, ʒ iv.; Iodi, ʒ ij.; Alcoholis, f ℥ j.—M.

Accidental Cardicentesis.—Dr. H. H. D. Moorman, of Dalton, Mo., sends a report of a case of this nature which he met with in his practice recently. The patient, a negro, twenty-two years of age, had suffered from repeated attacks of rheumatism, and when first visited was found to have a mitral regurgitant murmur, with slight enlargement of the heart. During the fifth week of his illness he was rather suddenly seized with a pain in the region of the heart, and suffered intensely from dyspnœa. "The precordial region was excessively sensitive to pressure, so that very little information could be obtained by percussion. Even the ear or stethoscope applied to the chest-wall caused such an increase of pain and dyspnœa that a satisfactory physical examination was an impossibility. Very naturally I referred both pain and dyspnœa to pericarditis, and as the dyspnœa increased progressively, I inferred that effusion was taking place. On the fifth day of the attack I again attempted a physical examination, and thought I made out an increased area of precordial dulness. As the dyspnœa seemed to threaten life, I concluded to aspirate the pericardial sac, and proceeded to do so on the seventh day of the attack. Dr. G. M. Dewer, of Keytesville, Mo., was present. I introduced a medium-sized aspirating needle in the fifth intercostal space, midway between the nipple line and the outer margin of the sternum. The point of the needle was directed slightly upward, and introduced to a depth of about two and a half or three inches. Upon turning the stopcock venous blood was seen to be running through the tube, and the needle was vibrating in the same manner as observed in the familiar dart-and-flag experiment performed by physiologists. Of course the needle was instantly withdrawn. About two drachms of blood had escaped, without producing any disturbance so far as could be observed. No adventitious sounds were heard afterward over the region of the puncture. The patient slowly recovered from his rheumatism—all symptoms disappearing or being modified. At the present time he suffers slightly from dyspnœa, has his old mitral regurgitant murmur, and the heart is slightly enlarged." Dr. Moorman was led to report this case from reading the article on "Cardiac Aspiration," in The Record of November 14th.

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Original Articles.

CYSTIC KIDNEYS WITH LARGE BILATERAL PERINEPHRITIC CYSTS.[1]

BY T. MITCHELL PRUDDEN, M.D.,

NEW YORK.

THE patient, a woman forty-seven years of age, corpulent, and with pale, sallow complexion, had suffered for sixteen months from meno- and metrorrhagia. Three months before death she had abdominal pain; the legs were œdematous. The vagina and cervix were of cartilaginous hardness, and the vagina so much contracted as scarcely to admit the examining finger. At this time the hemorrhages had entirely ceased. A diagnosis of malignant growth of cervix and vagina was made, supposed to be scirrhous carcinoma.

She continued to suffer from severe abdominal pain, especially referred to the right hypochondriac region, and with shortness of breath. Area of hepatic dulness apparently reached to umbilicus. Ascites slight. Œdema of subcutaneous tissue of abdomen excessive. Urine contains no albumen. Microscopical examination was not made.

At the autopsy the liver was found to be small and pressed upward by a cystic-looking tumor which occupied a large part of the right side of the abdomen, and was adherent to the mesentery and coils of small intestines. During its removal it was accidentally ruptured, and about one litre of bloody fluid containing flocculi of lymph was emptied. This cyst contained the right kidney. On the left side the same condition was found, except that the cyst was smaller. Both ureters were considerably dilated. Owing to the peculiar circumstances under which the autopsy was made, the lower part of the uterus and the vagina were not examined.

The cyst around the left kidney, which was intact, was found, when opened, to contain about three hundred cubic centimetres of transparent, yellowish, gelatinous material through which strings and flocculi of fibrin are scattered, and from which on removal from the sac clear yellowish fluid oozes. The cyst is 20 ctm. long and 11 ctm. wide. It contains, aside from this gelatinous material, in its posterior portion, the left kidney. The cyst wall is composed of dense connective-tissue, which in its outer layers contains a varying quantity of fat, and is from .5 to 1.5 mm. in thickness. Its inner surface is smooth, is covered with a thick pellicle of fibrin, and presents no internal cellular lining. This cyst-wall is attached to the kidney along its pelvic edge and along the convexity, so that the anterior surface of the kidney forms a part of the posterior cyst-wall. The kidney is 15 ctm. long, 9 ctm. broad, and about 4 ctm. thick. The posterior surface of this kidney is covered by a thick, dense connective-tissue investment which appears to consist of the thickened capsule of the kidney, rather loosely joined to the membrane, which passing forward forms the anterior portion of the above-described cyst-wall. On stripping the thickened capsule from the posterior surface of this kidney, it leaves a slightly nodular but in general rather smooth surface, on which three or four small cysts are seen, the largest about three millimetres in diameter.

The anterior surface of this kidney, which forms a part of the posterior wall of the large cyst, is thickly studded with small cysts, varying in diameter from one to thirteen millimetres. These are flattened, lie close beneath the capsule, and contain a transparent gelatinous material, similar in appearance to that with which the large cyst is filled. Over these small cysts the capsule is very thin, but between them it is thickened, in places, to nearly one millimetre. The capsule near these small cysts is, in places, of an orange color. A large, dilated blood-vessel, filled with a blood clot, projects from this free surface. On meridional section through this kidney the cortex is found thickened (in most places one centimetre thick); the markings are indistinct, and the whole appears as if not well preserved. (The specimen had been for some time in dilute alcohol.) The pelvis and calyces are dilated so that they would hold about from twenty to thirty centimetres of fluid. The mucous membrane of the pelvis presents no trace of inflammation.

The cyst inclosing the right kidney, which had been opened before it came into the hands of the writer, was about twenty-four centimetres long, sixteen centimetres wide, and nearly completely inclosed the kidney, being attached to it along its pelvic border. At the upper part of the kidney, anteriorly, a small opening led into another cyst similar to the large one, and forming a part of the complete cystic investment of the organ, which measured about seven centimetres in diameter. The wall of these large perinephritic cysts was similar to that on the other side, but in places was somewhat thicker. The surface of the kidney on both sides was studded with small, flat cysts, containing gelatinous material similar to those in the other kidney.

Microscopically the posterior portion of the left kidney showed a considerable increase in the interstitial connective-tissue. In other parts of both kidneys the interstitial tissue was but slightly increased in amount.

There was apparently swelling of the epithelium of the tubules, but the poor preservation of the specimen would not permit of a definite conclusion as to epithelial changes.

In the cortical portion, especially of the left kidney, close beneath the capsule, and scattered among apparently normal tubules, are found dilated convoluted tubules, with flattened epithelium, which are filled with gelatinous material, looking under the microscope somewhat like very soft mucous tissues (see Fig. 1). Near these, in the cortex, as well as in the thickened capsule, are small rounded cavities without a distinct cellular lining, which was filled with the same gelatinous materials (see Fig. 2). Between these simply dilated tubules and microscopic cysts and the larger cysts beneath and in the capsule on the surface of the kidneys (see Fig. 3) all intermediate forms are to be found.

The small cysts beneath and in the capsule, as well as the enormous cysts inclosing both kidneys, contain the same gelatinous material, which presents the same microscopical appearances as the above-described dilated tubules and the tiny cysts near them.

The orange color of the capsule near the small cysts is due to crystals of hæmatoidin.

Résumé.—We have thus two large kidneys with dilated

[1] The following case was reported, and the specimens presented, to the New York Pathological Society by Dr. H. J. Boldt, in behalf of Dr. Samuel Kohn, candidate for membership. The specimens were referred to Dr. Prudden for examination, and the following is his report, together with an abstract of the history as furnished by the candidate.—Wesley M. Carpenter, Secretary.

pelvis, calyces, and ureters, in a condition of chronic diffuse nephritis, and with the exception of the posterior surface of the left kidney, thickly bestrewn with small superficial intra- and subcapsular cysts containing material of gelatinous appearance. Thus far the organs present a lesion which in degree and kind is not unusual. But in

FIG. 1.—Dilated tubules filled with gelatinous material in cortex of kidney (left), × about 200.

addition to this both kidneys are lying, one with one, the other with both surfaces free, in the cavities of large inclosing cysts, which have a capacity respectively of about three hundred and one thousand cubic centimetres. One of these cysts, the larger, contains bloody fluid, fibrin, and gelatinous material, the other gelatinous material, clear fluid, and fibrin. Both kidneys are covered with a connective-tissue capsule which is thicker than normal, while the walls of the inclosing cysts are thicker than the capsules themselves.

Macroscopical and microscopical examination shows numerous intermediate stages between tubules simply dilated with gelatinous material of definite microscopical appearance, like small intra- and subcapsular cysts, and the large perinephritic cysts themselves.

Although in a lesion as old and extensive as this, it would be unwise to assert with great positiveness the exact mode of origin of these large perinephritic cysts; the date above furnished would seem to the writer to justify the conjecture that the process commenced as an ordinary bilateral cystic kidney, associated, as is often the case, with chronic diffuse nephritis. But while most of these cysts remained small, others increased in size, and working their way between the layers of the capsule

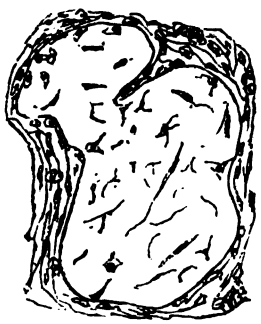

FIG. 2.—Small cyst filled with gelatinous material in cortex of left kidney, × about 200.

of the kidney produced the large inclosing cysts. The walls of these cysts are so thick that we must assume that hand in hand with the accumulation of the gelatinous material there occurred, as is frequently the case during the accumulation of adventitious material in various parts of the body, a thickening of the connective-tissue which formed the cyst wall. Whether the outer cyst capsule was formed by a splitting up of the kidney capsule, or from the connective-tissue of the fat capsule, or from both, it would be difficult or impossible to say.

Whether the kidneys were originally the ordinary congenital cystic kidneys or not, it would also be impossible to decide. The above-described intermediary forms between the larger and the smaller cysts would indicate that the process was progressive at the time of death. Furthermore, some of the small cysts in the kidney capsule have rather the appearance of cysts of mucous softening than of dilated tubules; but still, even if this were the case, they might have originated in the latter.

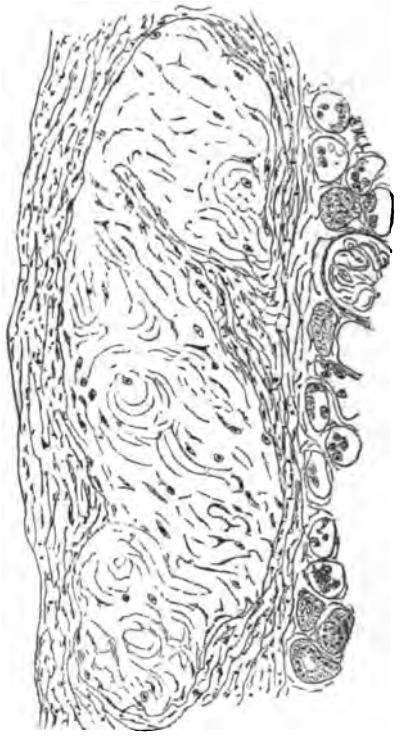

FIG. 3.—Section of the subcapsular cysts, × about 80.

It is a striking fact that the outside of the kidneys (posterior of the left) which is not involved in the large inclosing cysts at all, is the one which shows almost no small intra- and subcapsular cysts, and beneath which there is much new-formed interstitial tissue.

In the absence of a definite knowledge of the condition of the pelvic organs, it is impossible to decide whether the factors which induced the dilatation of both ureters and pelvis could have contributed to the development of the cysts; but it seems probable to the writer that they had nothing to do with it.

The writer has been unable to find any similar recorded case.

THE CONTAGIOUSNESS OF LEPROSY.—Although most authorities are in accord in the belief that leprosy is not contagious, yet there are some who claim that the disease may be communicated by contact. In a discussion held not long ago, before the Academy of Medicine of Paris, M. Vidal upheld the theory of contagiousness, but his views were controverted by Hardy, Dujardin-Beaumetz, Leroy de Méricourt, and others. Dr. Zambaco, of Constantinople, the physician to the Miskin Hané, the most notable lazaretto in Europe, is a strong non-contagionist. He asserts that he has never known a case of the disease to have been acquired by communication with a leper, although the patients of the Miskin Hané are visited by their relatives and friends without any restrictions. Heredity, he believes, is an important factor in the etiology of the disease.

A LARGE TUMOR.—M. Terrillon recently removed from a man, thirty-five years of age, a lipoma weighing fifty-five pounds. It was attached to the mesentery, and the incision necessary for its removal extended from the pubis a distance of twenty-two inches, nearly to the xyphoid appendix. Eight days after the operation the patient was reported to be in good condition, with every chance for a perfect recovery.

A MODIFICATION OF FÖRSTER'S METHOD OF ARTIFICIALLY RIPENING CATARACT.

By THOMAS R. POOLEY, M.D.,
NEW YORK.

THE fact, now well known to those who have used cocaine in operations upon the eye, that the aqueous humor escapes very slowly after puncture or incision of the anterior chamber, led me to consider whether its use would not enable us to perform the operation suggested by Förster without an iridectomy.

The obstacle against such a procedure as proposed by him, without first making a large iridectomy, is obvious. The lens, after the escape of the aqueous humor, will fall forward and come in contact with the cornea; unless the iris has been removed or the pupil is kept widely dilated during the next step of the operation, which consists in rubbing the cornea over the exposed surface of the lens, the iris will be injured. This is accomplished by the use of cocaine. If the pupil be first fully dilated by atropine, the subsequent use of cocaine will prevent it, by the slow escape of the aqueous, from at once contracting. That such a method of operating might be resorted to, has already been suggested, but, so far as I know, not yet attempted.

Candron, in an article on the artificial maturation of cataract (*Rev. gén. d' Ophth.*, 1883, No. 6), says, at the conclusion of his paper, that the maturation of the cataract, when we intend to extract without preliminary iridectomy, may be done by making paracentesis of the cornea, letting the aqueous escape, when the lens would fall forward upon the cornea, after which the lens could be triturated from without. In order, therefore, to determine whether an immature cataract can be matured in this manner, I resorted to the following experiments on a rabbit's eye. As it was very difficult, if not impossible, to procure a rabbit with an immature cataract, my first experiment was to see whether a healthy, transparent lens could be rendered cataractous by this method.

The operation was done in the following way: First the pupil was dilated to its utmost extent with atropine, then, from three to five minutes before operating, a few drops of a four per cent. solution of cocaine put in the eye. Paracentesis of the cornea was then made with a broad needle, taking care not to wound the lens capsule. The needle was then slowly withdrawn, allowing the aqueous to escape slowly. Trituration of the cornea was now made in a circular manner, the escape of the aqueous thus completed, and the collapsed cornea came in contact with the lens. The pupil remained moderately wide throughout this procedure and then slowly contracted. Atropine was now instilled, and the animal put in a barrel in which some clean straw had been placed. No attempt was made to close the eye in any way. The following day the pupil was contracted, but there was beginning opacity of the lens. By the vigorous use of atropine the pupil became wide, and the lens, which was well seen now, showed very decided opacity, most marked in the anterior cortical layer. The lens seemed to reach its maximum of opacity in from two to three weeks, but did not become complete, but showed a mottled, mother-of-pearl appearance, with opaque and clear setons (immature cataract). The ophthalmoscopic image was not shut off. The operation was therefore repeated on the same eye, April 12, 1885, and executed exactly in the same manner as the first. Immediately following the operation the opacification of the lens was more marked, and in the course of from three to four weeks the cataract was complete, so that the entire lens was opaque, and ophthalmoscopic view of the fundus no longer possible (mature soft cataract).

There was no inflammatory reaction following either of the operations, although after both the lens was considerably swollen, as shown by the narrow anterior chamber from bulging of the iris. It required, too, for the first few days rather active use of atropine to maintain dilatation of the pupil, which, a few days later, would remain wide enough from a single instillation once in twenty-four hours. At no time during the formation of the cataract did the animal seem to suffer any pain. It was only confined to the barrel for a few days after each operation, and the rest of the time allowed the liberty of the back yard. From these experiments, then, it seems to be proven that an operation for the maturation of cataract may be successfully done without any great risk of danger, without making an iridectomy. I have not, as yet, ventured to perform it on a patient. Nor do I feel sure, as yet, that further experience or observation will commend the method. I only communicate the result of my experiments for the purpose of giving my experience to the profession, leaving the future and the accumulated experience of my colleagues to decide whether the proposed modification shall be adopted.

MEDICO-LEGAL CASES.

By HENRY A. RILEY, ESQ.,
NEW YORK.

THERE was a famous case in New York, quite a number of years since, where a druggist in a country town gave out belladonna instead of extract of dandelion, in preparing a prescription. The wholesale manufacturer was the one who had made the original mistake, and the country druggist did nothing more than give out what had been placed in his hands as a harmless drug, when in reality it was a poison in the quantity used. The question at issue was whether the manufacturer or the dispenser was liable, and the court held that the former was. The same drugs now appear in an Iowa case, where the same mistake was made. The circumstances were unusual, and in some degree amusing. The druggist was preparing the prescription, when the customer helped himself to a dose from the jar. The druggist saw him take it, and the effect upon him stopped the further preparation of the prescription. The customer soon afterward sued the apothecary for damages. The answer interposed was to the effect that the customer was a trespasser in trying to help himself from the jar, and that if he suffered from so doing it was his own fault. The merits of this defence came up for consideration, and the court decided that it would not avail the apothecary. It was stated that as the customer took the dose with the knowledge of the apothecary, it would be under an implied promise to pay if asked to, and this negatived the idea of a trespass. The two persons were acquaintances, and the custom of "helping" one's self to drugs or goods is not an uncommon one in country stores. The apothecary therefore had to pay for the mistake of having belladonna in a jar supposed to contain extract of dandelion. The two drugs are much alike, but it will be a satisfaction to the public to be able to feel that the apothecary is bound to know what he is doing when he handles a dangerous article.

There are two projects of compulsory legislation in New York interesting to physicians. One of them is a bill making vaccination imperative, and this subject was recently discussed by the Society of Medical Jurisprudence in this city. It was the general opinion, however, that a law would not be wise now, and that the true policy was to make the public better acquainted with the merits of vaccination. On this point, it was stated by Dr. Taylor, of the Board of Health of New York City, that the opposition among people in the poorer districts was much less that it had been.

The other project is a bill providing that the bodies of all persons dying of contagious or infectious diseases shall be disposed of by cremation. The arguments in favor of such a law are hard to meet, but the attempt to put it upon the statute-book would be very likely to stir up opposition to cremation in any case. As it is now, cremation is making wonderful progress in popular favor,

but nevertheless the vast majority of people still believe in earth burial, and will for generations to come, perhaps forever.

The great and increasing use made by manufacturing companies of the water-power furnished by running streams and the necessity of throwing refuse matter into the streams, which are thereby injured for drinking purposes, is an important question frequently calling for determination in the courts.

A recent decision in a Maine court, while not raising the question of injury for drinking purposes, involves the same principle, and will be of interest.

The Kennebec River, in Maine, has numerous dams which give water-power to a large number of mills of a great variety of industries. Some of these near Waterville are cotton mills, and the refuse thrown into the river by the lumbering mills some miles above gets into the race-ways, clogs the wheels, and frequently compels a stoppage of the entire mill until the matter can be cleared away. A very large amount of capital is employed in both branches of industry, and the mills have been established for years. The question now arises whether the cotton mills have such a right to the free use of the river water that they can compel the lumber mills by injunction to stop throwing refuse material, shavings, edgings, sawdust, etc., into the stream. The lumber-mill proprietors say that there is no other way to do but to let the water carry off the refuse, and that to be obliged to adopt some other means of getting rid of it would be so expensive as to render the mills worthless. The cotton-mill proprietors say that they cannot carry on their business without loss unless the practice is stopped. It will be seen that the question is a very important one, and involves the right to throw matter into a stream which may make it unhealthy to those using it for drinking. The court considered the case very carefully, and a large number of lawyers were employed on both sides. The decision, which has now been rendered by the highest court in the State, holds that the lumber mills cannot be permitted to throw refuse matter into the stream, and orders an injunction to issue against everything except common sawdust. The lumber mills were allowed, however, four months' time to arrange for some method of disposing of the waste material before the injunction should issue.

An interesting question in the law of *habeas corpus* was brought up in the case of Surgeon-General Wales, who, during the proceedings at Washington in his case, was ordered by the Secretary of the Navy to remain within the bounds of the city of Washington. The medical director thereupon secured a writ of *habeas corpus* to test the question of his lawful detention within the city limits. The granting of this writ came before the Supreme Court, and it was there held that the famous writ only applied to those persons actually imprisoned, and was a safeguard against unlawful imprisonment. Surgeon-General Wales was only under moral duress through the order of the Secretary of the Navy, and could have disobeyed if he had so desired. It was therefore decided that he had no right to have the writ issue in his favor.

THE ABUSE OF THE PRESENT DISPENSARY SYSTEM.—Dr. W. H. Haynes, of this city, writes: "As I understand it, the present dispensary system arose in this manner: Years ago each doctor was in the habit of appropriating a portion of his time, skill, and remedies to the treatment of poor people without charge. Later on the generous public took the burden of providing a proper place and medicines off their hands, and concentrated the labor in the hands of a comparatively few younger members of the profession, who gladly assumed the burden for the benefit they received in experience and income. This arrangement proved satisfactory till within the last few (ten) years, when abuses have arisen in consequence of increase in the number and in the attendance of improper subjects at these charitable institutions; so that now, besides the recognized general dispensaries, we have life insurance companies, beneficial organizations, and druggists carrying on such an institution in a modified way, as a legitimate branch of their business, aided by medical men who, not being able to make a living in the legitimate manner, are compelled to take these appointments in self-defence, to gain a maintenance by the advertisement and income they offer; of course, to the detriment of their brethren who are not so fortunate, or deem it unworthy, and, therefore, the ones to suffer. Now, this condition of affairs has been brought about as much by the profession itself as by the public, the former becoming too numerous, and the latter, except where a selfish motive is evident, too generous as regards this form of charity. Therefore it seems to me that the remedies must be applied to both these circumstances, and applied the same in both instances, viz., limitation in the first place of the number of men, and in the other the generosity of the public from providing any more such institutions, by law and education. In the meantime there is no better method of partially limiting the above than through the labors of the Charity Organization Society, but the main remedy lies with the profession itself, by raising the moral tone of their own body through the methods indicated."

THE FIRST BACTERIOLOGIST.—In the year 1726 a quack, Boïle by name, made his appearance in Paris, and promulgated a new theory of disease. All maladies, he said, were due to the presence of animalcules in the tissues, and all that was necessary to effect a cure was to introduce other and stronger animalcules which would destroy the disease-producers. He had, he claimed, a large supply of the superior and curative animalcules, and would dispose of a sufficient number of them to any one who stood in need of their services and would pay for them. Of course he found plenty of customers, and soon drove a thriving business. But he came to grief. He used to demonstrate under a magnifying glass the action of his remedies. He would take a little blood from the patient, and, putting it under the microscope, would exhibit to his awestruck visitors a number of hideous forms which were the cause of the malady. Then he added a drop of his special culture and away would go the wicked animalcules, leaving the field clear. Some incredulous fellow, however, examined into the matter a little too minutely, and discovered that the microscope had a false bottom and that the battle of the animalcules was nothing but a painted show. This discovery had the same effect upon M. Boïle that his remedy had upon the germs—he disappeared with amazing celerity.

PYRIDINE IN THE TREATMENT OF ASTHMA.—Dr. Neff has used, with perfect success, the new drug pyridine in the treatment of the paroxysms of *asthma* in six different cases, independently of the cause, whether bronchial, cardiac, or renal. It seemed not only to relieve the paroxysm, but also to prevent the return in a measure. As the remedy is so very irritating to all the mucous membranes, the following method is used in its administration: The patient being placed in a small room, from thirty to forty drops of the drug are put on a plate and placed at a little distance from the patient. This may be repeated if necessary, and the inhalations kept up from five to thirty minutes, but relief usually is obtained in from one to five minutes.—*College and Clinic Record.*

VETERINARY SURGERY.—Mr. Snarry, a veterinary surgeon, has accomplished a novel feat in the way of surgery. A cow on the Westow Grange Farm, near York, broke its leg, and there being no chance of reducing the fracture, the limb was amputated, and Mr. Snarry tried the experiment of affixing a wooden leg. This has been found to answer admirably, and the cow may be seen grazing with a calf by her side.—*Provincial Medical Journal.*

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GEORGE F. SHRADY, A.M., M.D., EDITOR.

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CONTROLLING SEX IN GENERATION.

WE are loth, most of us, to accept new theories concerning any vital phenomena. Such acceptance involves a rude disturbance of our mental ease, and we hesitate to bestir ourselves, particularly as we do not know whither our steps may lead us. If any new theory is to be entertained its logical conclusions necessarily enforce themselves, though we may not at first see their relations to previously existing facts. Often our first ventures are hindered by our recollection that the promulgators of new theories have very biased views. Collateral proof strengthens us, particularly when it comes from one approaching the subject from a standpoint which differs from that of the original champion of the new idea. An illustration of this fact is found in the recent publication, by a layman, of a volume with the title, "Controlling Sex in Generation."

The author is Mr. Terry, whose residence is not given. The publishers are a well-known firm in this city. To anticipate, the conclusions reached in regard to the subject are identical with those obtained some time since by scientific observers, viz., "That at the generation of male offspring the mother must be in a higher degree of sexual excitement than the father. And, reversely, at the generation of female offspring the father must be in a higher state of such excitement than the mother." The value contributed by this particular volume to the question lies (as we have indicated) in the fact that its author is an intelligent layman, who writes in a spirit of candor, and who presumably is free from the many tendencies to one-sided opinions which encompass purely scientific men.

The writer has been, according to his preface, a husband and father for over thirty years. His first five children were all girls. A natural desire for sons led him to look into the subject of origin of sex, and to collect and collate facts bearing thereon. From these facts he adduced the theory we have stated. Experiments with some farm stock confirmed it to his own mind. This physical law, he frankly tells us, he has put in practice in his own marital relations, with the result that of the last four children born to him, three were boys.

He regards the subject as one of importance, in view of the existing and increasing excess of females over males in all the fully-settled portions of our country. He argues that this is partly owing to the gradual decline in the strength of mothers, taking them as a class. This decline has three material indications: the first is shown in the proportionally increased number of deaths of boys in early infancy from debility, marasmus, etc.; the second in the increased proportion of boys among the still-born children; the third in the decrease in the conception of boys. These facts are illustrated in extensive and carefully prepared statistical tables, compiled from the mortality records of some of our largest cities and states. The relative mortality of boys to that of girls is, in still-births 100 to about 68; in brain diseases, 100 to 82; in diseases indicating feeble vitality (debility, marasmus, etc.), 100 to 85; the same ratio holds true in diseases of the respiratory organs; in diseases of the nutritive organs, 100 to 91; contagious diseases he finds about equally fatal in both sexes. From the study of the lower forms of life he advances to the assumption that any physical law governing sex operates either before or at the moment of conception or impregnation, and not afterward.

The natural sequence follows that in order for parents to have male offspring, it is necessary for them to put themselves under those conditions wherein this physical law may act. Inasmuch as most of our women in modern civilized life are physiologically below par, every favorable circumstance of environment ought to be brought to bear upon them. Fashionable follies should be shunned. In the large and influential class of women who avoid these—the class known as the religious world—the desires connected with maternity should receive a higher respect; a holier and less sensual idea should be accorded to the fulfilment of the maternal duty. Physical debility in the wife renders proportionally stronger the sexual impress of the husband. Under the operation of the law female children result. The more sickly the wife, the more debilitated the children. Says the author: "There was never yet a right-minded wife who would not be proud to be surrounded with a round dozen of stalwart, clear-headed sons and rosy-cheeked daughters; but when they come forth pale, stunted, scrofulous, and spine-distorted, fit only for the physician's hands, one or two quite suffice to satisfy the mother's pride."

The conclusion drawn as the final one is, that given a wife in average health desiring male offspring, she should carefully observe her disposition in regard to sexual desire with reference to the days following menstruation, and the time when this disposition is felt most strongly should be chosen for the performance of the marital function.

In the experience of the author it is noteworthy that all three of the male children born to him died in infancy, not one surviving till the birth of the next. The remaining child of the four was born intermediate between the second and third son. She suffered the usual run of infantile diseases (some of them being more severe, seemingly, in their attack, than were those that carried off the male children), and grew up to be a robust child. The author observes that women who bear preferably female offspring are often deficient in milk for males, if such are born to them. He thence argues that wet-nurses are more necessary for males.

The wonderful influence which brings the sexes together in reproduction he regards as a sort of animal electricity—

the male being the positive and the female the negative element. He adduces the alkalinity of the semen and the acidity of the menstrual fluid (asserted by some) as analogous in reaction to the behavior of certain chemical bodies when subject to disintegration by electrolysis.

We have, in the foregoing, outlined the main features of the volume. Many interesting points have not been touched upon. The author's lucid style and logical method show him to be no shallow observer of sociological and biological facts. He claims that the large surplus of women in the community is now the cause of many social evils as well as moral ones. Hence he feels "no doubt as to the propriety of publishing to the world a modest theory that professes to show how this relative disproportion of the sexes originates, and how the equilibrium can be restored" He asks for a careful examination of his theory before it is condemned. He claims to be actuated by a desire to do good, and asserts his honest belief in the truth of the theory advanced. In any event, the book is valuable as the contribution of a conscientious, intelligent layman to the solution of a scientific problem.

A CURIOUS MISREPRESENTATION.

The Medical and Surgical Reporter does us extreme injustice, and at the same time informs us of something entirely new. We are told that "THE MEDICAL RECORD is the organ of the New York circle," and that "its great mission has been submerged by an exceedingly unpatriotic course." Our valued contemporary has made an entire mistake, which we feel it will now be the first to correct. THE MEDICAL RECORD is an organ of no circle or clique whatever, but only of the medical profession of the United States. It has always endeavored consistently and earnestly to promote the welfare and elevate the status of the general practitioner. We venture to affirm that no medical journal is in more hearty sympathy with readers of this class all over the country, or receives from them in every State and section so many letters and communications showing an interest in the scientific and social advance of the medical profession. The Organ of a Circle! In the Name of the Prophet, Fudge!

A DANGER IN PUBLIC BATHS.

A CASE is related by Dr. Aubert, in the *Lyons Médical*, No. 35, 1885, of a family in which the father, mother, and little daughter were all suffering from gonorrhœa. The infection of the mother from her husband was evident, but the mode of communication of the disease to the four-year-old girl was not so clear, until the woman mentioned the fact that she had bathed twice since she had noticed the discharge from the vagina and had felt a scalding on passing water, and had taken her little girl into the bath with her. She said that the child had commenced to have a discharge from the vagina three or four days after taking the first bath. Another child in the same family, whom the mother had not taken into the bath, remained free from the disease.

In *Lo Sperimentale*, No. 10, 1885, Dr. Filippi asserts, in commenting upon the above case, that during the past year over fifty little girls acquired vulvitis, and some of them grave ophthalmia, in the free medicated baths of Santa Lucia, in Florence. The contagion was apparently conveyed in the water of the bath, which was limited in quantity and seldom changed.

This danger of acquiring not only specific vaginitis and ophthalmia, but other diseases, through the medium of water which is not constantly renewed, is one which would seem not to have received the attention it deserves. In the summer bath-houses along our river fronts there is a constant flow of water, it is true, but it may be doubted whether even there at slack tide this current is sufficient to carry away all infectious material. But in the winter baths, of which there is quite a number in New York, the water is warmed, and is not always renewed as often as it should be. If the project of some philanthropic individuals of providing free public baths in winter as well as in summer should ever assume definite shape, it would be necessary to consider this danger of infection and to take the proper measures to guard against it.

News of the Week.

CONCERNING THE DISINFECTION OF RAGS.—Mr. Augustine Smith, of this city, Vice-President of the American Paper-Makers' Association, writes: "The medical profession, of which you are a representative, is rightly regarded as the defender of the public against quacks and impostors. The confidence it has so well earned in this direction carries a certain responsibility with it, because it makes it very desirable for quacks to gain the aid of the profession where that can be done. It is in view of this responsibility that I wish to lay before you some facts touching the importation of rags (the raw material of paper) into the port of New York. Under the law of the State, as now interpreted and practised, it is within the discretion of the health officer of New York to forbid the landing of imported rags, no matter whether they be brought from infected districts or not, or whether there be reason to suppose that they are themselves infected or not, unless they are '*disinfected*' *to his satisfaction*. This is the accepted law and the actual practice at this port, and this extraordinary discretion is subject to no accountability or control except by the Board of Quarantine Commissioners, and in their hands the power of control, as a matter of fact, is not exercised. Now, the manufacturers of paper contend that this practically unchecked and arbitrary power in the health officer is subject to grave abuse, and that it is unnecessary to the protection of the public health. The manufacturers of paper do not wish to import disease. If they had no other reason for not wishing it, it is enough that it would be greatly against their interests to do so; for, as soon as it was known that they had done so, their employees would leave, their mills would be closed, and their importations would be stopped. They have been taught by experience to doubt whether rags can be thoroughly disinfected, especially in the bale. They are willing and desirous, if rags can be shown to be infected or to have been gathered in infected districts, that these rags shall be destroyed. But they protest that it is a gross outrage on

them and on the public that their property coming from uninfected districts, in ships bearing clean bills of health, shall be subjected to a patent disinfecting process. They demand, and they think they have a right to demand, that if disinfection be required, it may be done by some other than a patented or secret process. Nominally a choice is given between two processes; in reality only one can be applied, and that one belonging to what, for want of a better term, I shall call the Quarantine Ring. This is being done now and here in the name of 'sanitarian' vigilance and 'humanitarian' zeal, and the medical profession are asked to approve it. I would respectfully ask them to examine carefully and consider candidly these facts before lending their powerful support to such a scheme."

Dr. John Dudgeon and His Work in China.—The people of China—an aggregate of over 250,000,000 of the human family—are under the deepest obligations to Dr. Dudgeon. This distinguished member of our profession, says *The Lancet*, has lived among them twenty years and more, with his head-quarters at the capital. He has there a hospital and a dispensary, which have been fruitful of incalculable good to thousands. He has also set up in the Foreign College, with the sanction of the government, the nucleus of a medical school for the behoof of those of the young Chinese who propose making physic the business of their lives. He is himself the Professor of Anatomy; and he has a colleague who teaches chemistry—a science which, along with anatomy, is perhaps the best introduction the Chinese can have to the study, not of medicine only, but of the other departments of natural science also. Very valuable has been his work as a professor. Utterly ignorant of anatomy as Chinese medical men are, Dr. Dudgeon is on the eve of doing the rising generation of them a signal service. He has just translated into Chinese two English works of great value—Holden's "Osteology" and Gray's "Anatomy"—both containing all the wood and other engravings to be met with in the originals. By means of these, apart even from the actual dissection of the human body, the Chinese students cannot fail, thus aided with figures and with the living voice of the professor, to acquire a fair knowledge of the make and constitution of the human frame. The dissection of it, if not forbidden by law, is at least a thing abhorrent to the people. Ere long, it is to be hoped that people and students alike may be able to say, in a sense of their own, what M. Snagarelle so confidently affirmed in reply to M. Géronte as to the relative position of the liver and the heart, "Nous avons changé tout cela." Nor is this all that Dr. Dudgeon has done for them. He is at present, we understand, engaged in translating for them, with all its engravings, Dr. Kirkes' "Handbook of Physiology." Dr. Dudgeon is surely deserving of the highest honor in thus largely putting before the Chinese, in an orderly and systematic form, truths of the greatest value to them as a nation.

The Cost of Managing the Hospitals of New York.—At a meeting of the Hospital Saturday and Sunday Association, December 21st, Mr. Stone submitted a statement showing the work and resources of each of the hospitals connected with the association for the year ending September 30th. The total expenses of the twenty-one hospitals were $601,801.44. There was an income from invested funds of $127,099.20, and from city, county, and State appropriations of $29,635.93. The amount received from contributions other than gifts or bequests to the permanent fund was $201,492.58; through the Hospital Saturday and Sunday collection, $29,917.10; from paying patients, $136,403.68—making total contributions applicable to hospital expenses, $524,016.33. The number of patients treated in the hospitals for the year was 11,969, of whom 9,332 were free patients, at a cost of $476,000. In addition, medical aid was extended to 109,741 cases through the outdoor and dispensary departments.

Investigating Contagious Ophthalmia in the Schools.—Dr. Derby, in a communication to the Board of Health, last week, said that contagious ophthalmia among children in public institutions had increased to such an extent that the Academy of Medicine had taken the matter up, and the Committee on Ophthalmia had arranged to thoroughly investigate the disease. About twenty-five prominent physicians had been selected to visit the institutions, and the Board was requested to appoint them as sanitary inspectors without pay. Colonel Prentice, counsel to the Board, sent in an opinion on the request yesterday. It is to the effect that the appointment of special sanitary inspectors, without pay, would not be proper, and he suggested that regular sanitary inspectors be detailed to accompany the physicians selected by the committee, so that the investigation and its results can be reported to the Board. A resolution directing the Sanitary Superintendent to detail two inspectors to accompany the physicians was adopted.

At a Meeting of the Lackawanna County Medical Society, December 8th, a telegram was received from Dr. J. V. Shoemaker, of Philadelphia, asking the society to rescind their resolution of last month condemning the action of the American Medical Association's new committee in excluding eminent physicians from the Congress. A motion to reconsider the resolution of last month was offered, and, after an animated discussion, was defeated.

"New Yorker Medizinische Presse."—A new monthly medical journal, under the above title, has just appeared in this city, edited by Dr. Geo. W. Rachel. It aims to be the organ of the German-American physicians of the country. It is intended to furnish an opportunity for the many German physicians ere who do not care to trust themselves in English to publish the results of their work and observation. The first issue contains a number of excellent original articles.

Medico-Chirurgical Society of German Physicians.—At the last meeting of the Medico-Chirurgical Society of German Physicians, the officers for the following year were elected as follows: President, Dr. C. Heitzmann; Vice-President, Dr. L. Weber; Recording Secretary, Dr. Willy Mayer; Corresponding Secretary, Dr. H. J. Garrigues; Treasurer, Dr. A. Throg.

Dr. Harman Leslie Snow, of Albany, N. Y., died on December 19th, after a long illness. He was President of the Common Council, and partner of Dr. Vanderveer. He was forty-nine years of age.

THE MEDICO-CHIRURGICAL COLLEGE of Philadelphia announces that it will not indorse any diploma of a person coming from other States and intending to register and practise in Pennsylvania, without the holder first passes a satisfactory examination. Fee, $30.

SEVERAL CASES OF SMALL-POX that had been concealed have been hunted up by the Board of Health during the past week. New York physicians are not making a specialty of reporting cases of this kind just now, the penalty for such work being from $500 to $10,000.

LONG ISLAND COLLEGE HOSPITAL, BROOKLYN.—Professor A. P. Grinnell, M.D., of the University of Vermont, will give the course of lectures on the Practice of Medicine at the Long Island College Hospital the ensuing year.

THE AMERICAN SUPPLY OF DOCTORS.—It is estimated that there are now in the United States 120,000 practitioners of medicine, including non-graduates.

PASTEUR'S INOCULATIONS AGAINST RABIES.—The four Newark children who were sent to Paris to receive treatment by Pasteur have arrived, and the inoculations began on December 21st. A cablegram to *The Times* announces that Pasteur has now under treatment 20 cases, and that he has treated 114 since the beginning of his experiments.

PROTESTING AGAINST THE LAICIZATION OF THE PARIS HOSPITALS.—The hospital physicians and surgeons of Paris, to the number of 106, have signed a petition, addressed to the Minister of the Interior, praying that the *religieuses* in the hospitals to which they are attached may be retained.

THE LIBRARY OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA.—At the December meeting of the College the standing committees presented their annual reports. The Library Committee reported that the library now contains 33,686 volumes and 1,393 unbound pamphlets, an increase in the year of 2,592, as compared with 1,261 in 1884, and 869 in 1883.

THE DEATH OF HENRI BOULEY, Professor of Comparative Pathology, is announced. Professor Bouley has long occupied the highest rank among students of comparative pathology. He was a member of the Académie de Médicine, and of the Académie des Sciences, and was Inspector-General of Veterinary Schools. He was an ardent supporter of the views of Pasteur. Among his principal works were a treatise upon rabies and a treatise upon the anatomy of the horse's foot.

NO MORE MEDICAL WOMEN.—It is reported that the New York Post-Graduate Medical School will not receive medical women as matriculants after the present session.

"THE CHRISTIAN NATION" is a religious journal which deserves hearty praise or two reasons—it refuses quack advertisements, and it denounces the "faith-cure" humbugs.

DEATH OF DR. JOHN S. HEARD.—Dr. John S. Heard, aged 70 years, died at Newburg, N. Y., on December 17th. Deceased was born in New York City. He graduated from Columbia College in 1834, and from the New York College of Physicians and Surgeons three years later. On graduating from the latter institution he became one of the two resident surgeons of the New York Hospital. In 1840 he began the general practice of medicine in New York City, continuing for twenty years. He gave up his practice in 1860 and went to Newburg, where he has since resided.

PRIORITY IN INOCULATIONS AGAINST RABIES.—The last thing thought of would be that a claim of priority would be put in against Pasteur's preventive inoculations against hydrophobia. We learn, however, from *Le Progress Medicale*, that in a medical journal called *Klinische Anweisungen*, appearing in Leipsic in 1849, under the title of "Rabies and Poisoning," an article is published discussing a method of preventing rabies by vaccination. The doctor employing this measure called himself Constantin Hering, and lived in Philadelphia.

THE STOMACH AND THE SOUL.—Twelve thousand people are daily under the charge of the Commissioners of Charities and Correction of New York City in the various hospitals and institutions over which that board has supervision. It costs the city $1,500,000 a year to care for their stomachs, while only $30,000 is spent on their souls, according to the statement of the New York Protestant Episcopal City Mission.

DEATH OF DR. ISAAC G. COLLINS.—Dr. Isaac G. Collins, of Sing Sing, died on September 17th, aged 53 years. He was born in Greenville, N. Y., and was a graduate of Union College and the Albany Medical College in 1858. He began practice in Sing Sing in 1864.

DAMAGES FOR REPORTING A CASE OF CONTAGIOUS DISEASE—AN APPEAL TO THE PROFESSION.

BROWN *vs.* PURDY.

THE facts of the above case are briefly as follows: In November, 1879, Dr. A. E. M. Purdy was called to see Miss Angelina Brown. On his arrival he diagnosticated small-pox. He saw her later in the day with Dr. A. S. Purdy, who likewise diagnosticated small-pox. Still later he saw her again with Sanitary Inspector Dr. C. E. Lockwood, whom he had notified of the case. Dr. Lockwood's diagnosis was small-pox. The patient went or was sent to the small-pox hospital. On her arrival the house-physician, Dr. Bowen, made a diagnosis of small-pox, and so reported to the Board of Health. He subsequently revised this diagnosis and certified that Miss Brown was only suffering from eczema, and told her that she need not remain in the hospital. She voluntarily remained there, however, for some days.

After leaving the hospital she brought suit against the Drs. Purdy, claiming damages to the extent of $10,000. She asserted that the diagnosis made by Drs. A. E. M. Purdy, A. S. Purdy, and C. E. Lockwood was incorrect, and that she had been damaged to the above-named amount by being sent to the small-pox hospital, and that she was sent there through the agency of the Drs. Purdy.

On the trial of the cause in November, 1885, in the Superior Court, before Judge Ingraham, the counsel for the defendants moved to dismiss the complaint, on the ground that the defendants had not sent the plaintiff to the small-pox hospital, but that the sending of Miss Brown to the hospital was the actof the Board of Health, for which the defendants were not responsible.

His Honor denied the motion, and ordered that the trial proceed before the jury.

The plaintiff on the stand gave a lengthy history of her experiences, and declared that she was not suffering from the small-pox in November, 1879, but from the effects of a local irritant that she had applied to the skin.

The defendants testified minutely as to the symptoms and eruptive appearances presented at the time of their examination, and declared that they were unmistakably indicative of small pox.

Dr. Lockwood testified to the same effect, and that his opinion was formed independently of the Drs. Purdy, and *that Miss Brown was sent to the hospital in conformity with the rules and regulations of the Board of Health.*

Drs. Austin Flint, E. L. Keyes, and Geo. H. Fox testified that, from the recital of symptoms and character of the eruption as detailed by witnesses, Miss Brown was undoubtedly suffering from small-pox at the time referred to. Other physicians were in court prepared to testify to the same effect.

At the close of the testimony the counsel for the defence again moved that the case be dismissed, on substantially the same grounds as before, to wit: that it was the Board of Health and not the Drs. Purdy that caused the transfer of the plaintiff to the hospital.

His Honor again denied the motion, and in his charge to the jury said in effect, that *the defendants had set in motion the machinery* that led to the plaintiff being sent to the hospital.

The jury brought in a verdict of $500 against the defendants.

The features of the case that are important to the medical profession of this State do not hinge on the correctness or otherwise of the diagnosis.

The essential point is whether a physician who complies with the law, requiring him to report cases of suspected small-pox, thereby becomes liable for any damage arising or claimed to have arisen through the subsequent acts of the Board of Health.

The decision of Judge Ingraham in sending the case to the jury would imply that the physician may thus become liable.

This decision, in accordance with judicial custom, will be considered law until reversed by a higher court.

The case of Brown *vs.* Purdy having been brought to the notice of the Medical Society of the County of New York, that body referred the matter to its *Comitia Minora* with power. The *Comitia*, believing that it would be expedient to appeal from Judge Ingraham's decision, provided sufficient funds could be raised, appointed a special committee, consisting of members of the Society, for the purpose of raising said funds.

This committee appointed a sub-committee to prepare a brief statement of the facts of the case, and the foregoing is their report.

(Signed) H. G. Piffard,
Daniel Lewis,
P. A. Morrow,
Frederick R. S. Drake,
A. H. Smith,
Sub-Committee.

In the light of the facts as above stated, the special committee earnestly urge the members of the Medical Society of the County of New York, to contribute to the fund now being raised for the purpose of carrying the case to the higher courts. To this fund Dr. A. E. M. Purdy has subscribed one thousand dollars, and Dr. C. R. Agnew five hundred dollars. Other subscriptions, of one hundred dollars and under, have been received. Additional funds are still needed and may be sent, by check or otherwise, to Dr. O. B. Douglas, 123 East 36th Street.

Any part of the fund not required will be returned pro rata when the suit is decided.

By order of the Special Committee,

Daniel Lewis, *Chairman.*
F. R. S. Drake, *Secretary.*

Obituary.

PROFESSOR JOHN C. DRAPER, M.D., LL.D.,

NEW YORK.

The death of Professor John C. Draper, of this city, occurred on the 20th inst., from pneumonia, after an illness of four days. He was the eldest son of Professor John W. Draper, and was born on March 31, 1835, in Virginia. He entered the University of the City of New York in 1852, and left it in 1854, in his junior year. He then entered the medical department of the University, from which he was graduated in 1857. For a year prior to this he had held the position of House Physician and Surgeon of Bellevue Hospital. In July, 1857, he went to Europe for the double purpose of advancing his studies and regaining the health which he had lost by a too persistent application to them. Upon his return, in December, 1858, he was appointed Analytical Chemist in the University of the City of New York. This position he retained for thirteen years. In 1860 he assumed the Professorship of Chemistry in the Cooper Institute, but relinquished it in three years. For six months, in 1862, Professor Draper served as Surgeon in the United States Volunteers, and was on General Wood's staff at Harper's Ferry when that place was surrendered. In 1863 he became a member of the New York Academy of Medicine, and became a member of the Council of that institution in 1870. It was also in 1863 that Professor Draper was elected to the Chair of Natural History of the College of the City of New York. This position he retained up to the time of his death. In 1866 he became Professor of Chemistry in the medical department of the University of the City of New York. In the academical, as well as the medical, department of the University, he was one of the most popular lecturers.

Professor Draper was widely and favorably known as an author. On his recent trip to England he was made the recipient of special hospitality by distinguished literary and scientific bodies. The results of his researches in chemistry have been made widely known by articles published from time to time for a number of years and in book form. The Professor's first effort in book form was a text-book on anatomy, physiology, and hygiene. It was published in 1865. Fourteen semi-scientific articles from his pen appeared in the *Galaxy* from 1868 to 1871, inclusive. These treated of such subjects as diet, dress, and ventilation. They were of general interest, and in certain parts of the country one of them, "Tobaccophagoi and Tobaccophagism," an able argument against the use of tobacco, drew down upon the author a storm of abuse and some threats. He received one letter from a Texan who promised to shoot him if he wrote any more on the same subject. Professor Draper edited "Scribner's Year Book of Nature and Science" for 1872, and the same periodical for the following year, when it appeared as "Draper's Year Book of Nature and Science." He also edited the department under this head in *Scribner's Monthly* up to 1876. In addition to a number of scientific papers of much importance, written subsequent to 1876, he completed, in 1882, and had published by William Wood & Co., "A Practical Laboratory Course in Chemistry." This work has since held an important place among text-books. His last work, an advanced text-book on medical physics, was published a short time before his death by Lea Brothers & Co., of Philadelphia. It contains nearly four hundred illustrations, and the work proved of such absorbing interest to the author that the attention he gave it probably hastened his death.

The degree of LL.D. was conferred upon Professor Draper by Trinity College, Hartford, in 1873. This was only one of many honors conferred upon him by learned societies. He was married in November, 1864, and leaves a widow, but no children.

Reports of Societies.

NEW YORK PATHOLOGICAL SOCIETY.

Stated Meeting, November 25, 1885.

JOHN A. WYETH, M.D., PRESIDENT, IN THE CHAIR.

DR. H. J. BOLDT presented, in behalf of a candidate, a specimen of *Bilateral cysts of the capsules of the kidneys.* The specimen was referred to Dr. Prudden for examination and report.

Dr. Boldt also presented the

BRAIN AND MEDULLA OF A CAT.

Some time ago he encountered serious symptoms from the use of cocaine, and, therefore, determined to experiment upon animals with the drug. In the presence of Drs. Spitzka, Waldstein, and Brill, he injected eleven minims of a thirty-three and a third per cent. solution of cocaine into a cat weighing seven and a half pounds. Death took place twelve minutes after the injection was administered. The first effect noticed was a sort of leaping gait, with dragging of the hind extremities, and soon convulsions took place, probably forty in number. After each convulsion there was a period of quiescence, during which the legs of the animal straightened, the head turned up, the neck curved backward, and immediately afterward a severe convulsion took place. The respiration simulated the Cheyne-Stokes. After death the temperature in the rectum was 104° F.

An autopsy was made half an hour after the animal ceased to breathe. A small quantity of dark-colored blood oozed from the dura mater, and the vessels of the pia mater of both brain and cord were intensely congested. There was an extravasation of blood in the fourth ventricle, and also a small extravasation in the anterior part of the medulla. There were minute extravasations all through the brain.

The lungs were entirely collapsed, empty of blood, and the right ventricle of the heart was overdistended; the left empty. Death seemed to have taken place through paralysis of the respiratory centre. The gray substance of the cord was overfilled with blood, and resembled, as Dr. Spitzka remarked, a bloody sponge.

DR. PUTNAM-JACOBI remarked that the phenomena described by Dr. Boldt implied rather contraction of blood-vessels from vaso-motor irritation analogous to the contraction observed after a local application of cocaine, and that death was due not so much to direct effect upon the respiratory centre as to contraction of the blood-vessels in the lungs and secondary obstruction to the circulation in the right side of the heart.

THE PRESIDENT remarked that all the capillaries throughout the body being affected, the heart was paralyzed, and first the right ventricle, because it was the weaker.

DR. BOLDT said that might be the case, but clinical experience had shown that the most important trouble after the use of cocaine was primarily encountered in the respiration.

THE PRESIDENT remarked that, according to his experience, respiratory and cardiac shock was more likely to occur from invasion of the surface in the neighborhood of the fifth nerve than in any other locality.

DR. PRUDDEN asked what the appearances were which led to the statement that the lungs were anæmic.

DR. BOLDT replied that they were entirely devoid of air, and were of a pale color.

DR. PRUDDEN remarked that the lungs of a cat are very white normally, and fall back from the chest when the sternum is removed as compared with the human lung.

THE PRESIDENT directed attention to the danger of using chloroform or ether after the use of cocaine, and cited a case in the practice of a distinguished surgeon in which the life of the patient was nearly lost by administering chloroform after cocaine had been used unsuccessfully. The heart ceased to beat and breathing stopped, but the patient was resuscitated after about five minutes of artificial respiration.

The same surgeon had also told him of a case in which he knew the same result to follow the administration of ether after the use of cocaine. He believed that it would be well for the Society to express itself in unmistakable terms concerning the danger of the use of either chloroform or ether after the use of cocaine.

DR. WESLEY M. CARPENTER remarked that the Society had already expressed, in most positive terms, its opinion against the use of chloroform as an anæsthetic.

ABSTRACT OF THE CASE OF PROFESSOR PANUM.

DR. D. BRYSON DELAVAN presented a photograph of the late Professor P. L. Panum, President of the last International Medical Congress, together with a history of his last illness and death, translated by Dr. Holger Mygind, from the report made by the attending physician, Professor Frier, to the Medical Society of Copenhagen. Professor Panum, aged sixty-four and a half years, had always enjoyed good health. Ten years before death chronic bronchitis, with frequent acute exacerbations, developed, followed by emphysema which, two or three years later, became well marked. His symptoms were confined mainly to cough and slight dyspnœa, the latter particularly apparent upon going upstairs. It never reached any important degree, however, until the last weeks of his life, when it became more severe and was attended with oppression. The attacks were usually short. Physical explorations of the chest revealed no disease of the heart or of the large vessels.

On the first of May, while returning home in a high wind, Professor Panum experienced some difficulty in walking, and was unable to keep up with his companions, stopping several times evidently to rest and regain his breath. Soon after returning home he felt severe pain in the region of the heart, and a sudden feeling as of something bursting in the left side of the chest. The pain increased and the patient became uneasy and alarmed. When seen by Professor Frier, at 10 P.M., he was pale, somewhat collapsed; the skin cool and not perspiring; the pulse slight, frequent, and irregular. He talked freely and his respiration was not particularly accelerated. He moved about the room easily, undressed quickly, and went to bed. Here he continued to complain of pain, which now included the sternal region, and radiated out into the left arm and to the fingers. He was very restless and with difficulty repressed exclamations of pain. Attempts to give warm and stimulating drinks failed, as they only produced nausea. His mind was perfectly clear. Hot applications and counter-irritants applied to the chest gave no relief, nor did a hypodermic injection of morphine. About midnight the pain began to decrease, and after another hypodermic he fell into a light, uneasy sleep. The pain did not return until about 8 A.M. the next morning, up to which time he felt so well that he was with difficulty persuaded to remain in bed and give up his morning lecture; he gave directions, however, as to his business letters. His own diagnosis of his case was functional disorder of the vagus and sympathetic nerves. Half an hour after his son had left him, his pulse being strong and his general appearance decidedly improved, and a few moments after he had spoken jokingly to those around him, he suddenly groaned, fell back cyanotic and unconscious, and, a few minutes later, died.

From the superficial examination made the night before, no increased dulness of the heart had been discovered, but tumultuous action, with long, strong murmurs which prevented the two heart-sounds from being heard or distinguished. Professor Frier's diagnosis was angina pectoris. The real cause of death was discovered post-mortem. Autopsy, May 3, 1885, twenty-nine hours

after death, made by Dr. Dahl. Rigor mortis well marked, death suggillations all over. The panniculus adiposus well developed on chest and abdomen. The upper lobes of both lungs and the right middle lobe emphysematous and œdematous. No fluid in the pleural cavities. Mucous membrane of bronchial tubes somewhat injected and covered with cohesive white mucus. The pericardial sac filled with a little more than a pint of dark fluid and clotted blood. Blood of a similar appearance was seen to flow out of a fissure of the anterior left ventricular wall. The fissure was five centimetres long, and was parallel with and close to the septum. Its edges were lacerated. A similar but smaller fissure, one centimetre and a half in length, was seen along the first one, and united to it by a cross fissure. Both extended through the subpericardial fatty tissue, which was infiltrated with blood and reached the muscular substance; this was perforated by several small fissures and holes, none of which were more than large enough to admit a probe. In the lower part of the fissure the probe entered a small cavity between the muscular and fatty layers which was filled with blood. Heart flabby, with much subpericardial fat, especially at apex, where it was more than one centimetre thick, while at the seat of the fissure it was exactly one centimetre. In a few places the pericardium was thickened and white. Length of heart thirteen centimetres, breadth the same. The apex was formed by both ventricles, and a little rounded. Aortic valves normal. Foramen ovale open. The tricuspid orifice admitted three fingers, the mitral four. The tricuspid and pulmonary valves were healthy. On the anterior mitral flap there was a large, white, thickened patch. The right ventricular wall was two millimetres thick, the muscular tissue being of a deep, dull, grayish-brown color. Toward the septum there was a limited yellow area, extending somewhat in depth. The cavity was enlarged. The left ventricular cavity was much enlarged, the wall at its thickest part being 8 mm., at the apex 2–3 mm. The trabeculæ were flattened and not much developed. Muscular papillæ of normal thickness, the muscular tissue flabby, much softened, and of same color as that of right side. At several places yellow spots were seen through the endocardium. Toward the septum, at a point corresponding to external fissure, was a rectilinear fissure four centimetres long. It did not quite correspond to the external one, crossing it at an acute angle. The edges of this fissure were flattened. At the bottom of it were several small holes, corresponding to those described in the external fissure. The surrounding tissue much softened, and infiltrated with dark blood. A fresh cut across the fissure and through the muscular layer showed this to be very thin, about two mm. close to the edge, and five mm. farther away. Aortic valves somewhat thickened. In the tunica intima were many white fibroid patches, and similar ones were found in both coronary arteries. In the vertical branches of the left, just after its separation from the horizontal branch, was found a constriction which barely admitted the passage of a fine probe. Upon opening the artery, here was found a soft, whitish-yellow plug, which covered a softened atheromatous cavity formed in the thickened and partly calcareous intima, which was perforated in several places by small holes. From here down to the rupture the artery seemed healthy. A little below the plug a small branch went off; it could be followed to the spot of fatty degeneration in the right ventricle.

Microscopical examination of the muscular tissue showed the fibres around the fissure to be atrophied and very fatty. There were no transverse striæ visible, and no increase of the interstitial fibrous tissue. Nuclei normal; many fibres broken by extravasation of blood. Specimens taken from other parts of the heart showed the transverse striæ were well marked, but everywhere there was more or less fatty degeneration. Other organs not examined. The plug which caused the fatty degeneration had probably developed during the last few weeks before death, causing the dyspnœa and oppression. The resulting rupture was probably observed by Professor Panum himself; but it seemed to have slowly penetrated the wall from within outward, not causing at first effusion into the pericardial sac, but only irregularity of the heart's action, pain, and nausea.

Dr. Van Santvoord presented a specimen of

CARCINOMA OF THE UTERUS,

probably primary of the cervix, and later involving the body of the organ. The clinical history had no special interest except the fact that the woman was confined and delivered of a living child within three days of her death.

At the autopsy the brain was not examined. The lungs exhibited a slight amount of hypostatic congestion. The heart was apparently somewhat fatty. The liver was pale on the surface, the intestines and omentum showed irregular patches of pigment, and the retro-peritoneal glands were also pigmented. In the broad ligament there were a number of irregular patches of pigment. The body of the uterus was about twice the normal size, closely adherent to the lower third of the rectum and to the bladder in front. The kidneys were exceedingly anæmic, their pelves considerably dilated, and one pelvis contained considerable clear urine. The ureters were dilated.

The uterus was firmly fixed; the cervix had been eaten entirely away by the malignant process; there was an ulceration into the urethra just as it joins the bladder, and the ureters were somewhat obstructed by thick, dense, fibrous tissue. The vagina was the seat of cancerous infiltration, and the endometrium also exhibited some thickening, due to the same process.

Dr. Van Santvoord also presented a specimen of

TUBERCULOSIS OF THE PHARYNX

which occurred in an infant, about two years of age, admitted to the Randall's Island Hospital four months before its death, in a cachectic condition, accompanying a large mass of enlarged glands under the angle of the jaw upon either side. The cachexia increased, and two and a half months before death slight cough was noticed, although nothing was discovered in the lungs except a few râles. About four days before death the house-physician thought the child had some difficulty in swallowing, and the larynx was observed to be covered with a thin grayish coating; the temperature 102.5° F. in the evening. Four days afterward the patient died of exhaustion.

At the autopsy the enlargements upon each side of the neck were found to be caseous lymphatic glands. The pharynx presented a roughened and somewhat worm-eaten appearance, with lenticular ulcers extending to some depth into the mucous membrane. The uvula was thickened and covered with granular elevations. The mucous membrane of the nasal cavities presented the same roughened appearance, and also the vault of the pharynx, from which it extended upon the nasal septum about one-fourth of an inch, and the convex surface of the inferior turbinated bodies also was in somewhat the same condition. The larynx upon the posterior surface had two small ulcers. Miliary tubercles were found in the lungs and also upon the pleural surfaces. In the middle lobe of the right lung was a single soft caseous nodule, with a number of areas of broncho-pneumonia. The spleen was filled with miliary tubercles. A number of tubercles were also noticed in the liver, and also in the kidney. In the intestines there were several tubercular ulcers. The retro-peritoneal and mesenteric glands formed a large mass which had undergone cheesy degeneration and was breaking down. The case was, therefore, one of the somewhat rare affection known as tubercular ulceration of the pharynx. Dr. Mackenzie, of London, has reported a number of cases, and says that they are more frequent than is generally supposed, and

that they are doubtless frequently mistaken for syphilitic disease.

Dr. Van Santvoord also presented the stomach and large intestine removed from the bodies of animals that had died of

HOG CHOLERA.

The stomach showed considerable gastritis, and at one point there was a necrotic spot, or so-called ulcer, sometimes observed in the stomach, but almost entirely in the large intestine, where it formed the characteristic lesion. The ulcer showed a dark, dirty sloughing centre, with yellow elevated edges, and this characteristic process extends to a variable depth, sometimes reaching the peritoneum.

The large intestine showed a swollen ileo-cæcal valve, chiefly on the side toward the colon, with irregular ulcers, and from about ten inches above the cæcum the gut was intensely hyperæmic as far as the descending colon, and the entire mucous membrane was sloughing, at least in the superficial portion. In the descending colon were seen enlarged solitary follicles with depressed, slightly ulcerated centres, and these also showed distinctly upon the peritoneal surface of the gut, as semi-translucent, pearl-like spots.

The other lesions found in the cases which he had examined were as follows: in the brain and cord he had found lesions in two cases; in two cases there was broncho-pneumonia, and in all a certain amount of œdema of the lungs with some mucus in the bronchi. In one case there were ecchymoses under the pericardium and endocardium. In one case the liver showed perihepatitis, and in another it showed a slight amount of flocculent lymph. In all of the cases there was enlargement of the mesenteric and retro-peritoneal glands, and in one of these the ecchymoses which occur so frequently. The spleen was normal in all the four animals examined. The kidneys showed no lesion except one in which there were a few small nodules, and also in the liver of the same animal there were a few nodules of the same character; but Dr. Van Santvoord was inclined to think that they had nothing to do with the disease of which the animal died.

Dr. Prudden remarked that although much has been done in the way of investigating the swine plague and the relation of bacteria to it, the matter does not yet appear to have been cleared up. While Pasteur asserted that his rouget was caused by a figure-of-8 coccus resembling that of chicken cholera, but not identical physiologically with it, Schütz found in the attenuated virus furnished by Pasteur himself, as well as in hogs affected with the disease in Baden, a fine bacillus apparently identical with the bacillus by septicæmia of mice of Koch. Klein's bacillus of swine plague is apparently not identical with that of mice septicæmia. The micrococcus of Salmon, recently redescribed in the report of the Bureau of Animal Industry for 1884, and of which he (Dr. Prudden) has in his laboratory pure cultures, received through the courtesy of Dr. Billings, of Washington, certainly could not be mistaken for a bacillus, nor does it resemble very closely the figure-of-8 coccus of chicken cholera. Löffler's experiments would suggest that this polyonomous disease may, after all, not be in all cases the same thing nor due to the same causes.

Dr. Delavan remarked that tuberculosis of the pharynx was unusual in adults, and its existence had been denied. There were cases sufficient, however, on record to make its existence undoubted. It was not by any means a common affection. He had seen three cases. The history of Dr. Van Santvoord's case was decidedly different from that of the same affection in the adult, because in adults the painful nature of the disease was very pronounced. He thought he had not seen a more painful case than one under his care of tuberculosis of the pharynx. The ulcers are particularly sensitive, and give rise to the most distressing dysphagia. The extreme painfulness had been regarded as one of the diagnostic points between tuberculosis of the pharynx and syphilis, as the affection often resembled syphilitic ulcers sufficiently close to mislead practitioners, and, besides, being so very rare, one was very liable not to think of the local affection being tubercular.

The Society then went into executive session.

NEW YORK ACADEMY OF MEDICINE.

Stated Meeting, December 17, 1885.

Abraham Jacobi, M.D., President, in the Chair.

VAGINAL AND VULVAR ENTEROCELE.

Dr. T. Gaillard Thomas read a paper on the above subject, in which he defined *five* varieties of herniæ that may show themselves in the vagina and vulva: 1, cystocele, or hernia of the bladder; 2, rectocele; 3, vaginal enterocele; 4, pudendal enterocele; 5, perineal hernia, or descent of small intestine by protrusion through the perineum.

The author of the paper passed hernia of the bladder and of the anterior wall of the rectum, and confined his remarks to descent of the intestines through the pelvic roof, protrusion through the labia majora and vagina, and through the perineum.

Attention was first directed to the scarcity of the literature of the subject, only very slight mention, or none at all, being made of it in works written by obstetricians and gynecologists. It was first mentioned in 1786. Sir Astley Cooper treated fully of it in 1804. The best account of it was published in the French Dictionary of Medicine in 1846.

Vaginal enterocele is descent of intestines into the pelvic cavity, either in front of, or posterior to, the broad ligament of one side. Usually intestines alone descend in this hernial protrusion; sometimes omentum accompanies them; possibly the sac may contain omentum alone. Usually small intestine makes up the contents of the hernia. It develops in the following manner: A loop of intestine gradually pushes downward the peritoneum, which forms the pouch of Douglas, a tumor forms in the vaginal canal, and may end by hanging outside of the body. Such a tumor has for its coverings: first, inverted vaginal wall; second, peritoneum; and for its contents intestine.

Unquestionably the greatest danger from this form of hernia arises from possibility of error in diagnosis, either in the parturient or non-parturient woman.

Dr. Thomas then gave the histories of two striking cases of error in diagnosis. The first was one in which a portion of intestine, and also of the omentum, was removed with what had been diagnosticated as a polypus. In the second a supposed abscess was opened, intestine protruded, and the patient died of gangrene.

The most frequent cause of these varieties of hernia is parturition. Nevertheless, some of the most striking cases have occurred in non-parturient women.

Vaginal hernia is often of but little account, and gives rise to only slight inconvenience, so long as it remains within the vagina.

The prominent symptoms are difficulty in locomotion, pelvic tenesmus, colicky pains, dragging sensations, etc. Obstructed labor is liable to result. A tumor of greater or less size is found, soft and yielding, which decreases in size by pressure, increases by coughing, gives a sense of gurgling, resonance on percussion, and is usually reducible by taxis, with the patient in the knee-chest position.

The conditions from which it is to be differentiated are prolapse of the vagina, uterus, bladder, and rectum; vaginal cyst; simple par-ovarian cyst and fibrous tumor pressing low down in the pelvis; cold abscess of the pelvis, and marked cases of tubal dropsy.

Most cases present striking features, and with proper care mistakes in diagnosis will not be made. It may develop suddenly, more commonly in a gradual manner.

Dr. Thomas then reported a case in which a consultant was unwilling to give an opinion in a case of suspected extra-uterine pregnancy without introducing the entire hand into the vagina, which he did with the patient anæsthetized, and when he withdrew his hand a loop of intestine followed it, having escaped through a rent made in the vagina. Dr. Thomas sutured the laceration, and the patient barely escaped with her life, after having had a severe attack of peritonitis.

Pudendal enterocele is recognized by the presence of a small-sized elastic tumor, about the middle of the labia majora of one side. The manner of its formation was then described.

The conditions with which it is liable to be confounded are, cyst or abscess of the vulvo-vaginal glands, cyst of the labia minor or major, abscess of the labium major, fatty or fibrous tumor of the labia, and tumors descending from the pelvic cavity into the labium of one side.

Erroneous diagnosis will probably lead to a fatal issue. The symptoms almost pathognomonic are: 1, Airy feeling upon palpation; 2, gurgling on replacement; 3, diminished tension in dorsal decubitus; 4, diminution in bulk on taxis; 5, resonance on percussion; 6, succussion upon coughing; 7, abdominal pains of a colicky character.

Perineal hernia may effect both male and female. In the latter it consists of a descent of intestines between the vagina and rectum, the advance being made posterior to the broad ligament. In the female it may be felt through the rectum and the vagina. All these varieties of hernia are amenable to taxis, the manipulation being aided materially by the knee-chest position. Strangulation may occur. Dr. Thomas then reported a case of extreme vulvar hernia, occurring in a multipara, thirty-nine years of age, who about six years ago first noticed a small lump in the vulva on the right side, and began to suffer from difficulty in locomotion and in micturition, dragging pains in the back, and general malaise. The tumor gradually increased in size, and finally extended downward to the middle of the thigh. The tumor could be made to disappear by taxis, with very slight gurgling, but resonance on percussion did not appear distinctly. It was impossible to retain the hernia by mechanical apparatus.

For it Dr. Thomas proposed to perform the following operation, which was endorsed by his colleagues, Drs. Emmet and Bozeman. First, laparotomy, causing an assistant to keep the hernial sac well within the pelvis by means of one hand within the vagina, then to pull all the contents out of the sac, seize the sac at its most dependent part, drag it up and fasten it into the abdominal wound with sutures, sustaining the heavy sac by two knitting-needles passing through and lying flat across the abdomen.

The operation was complicated by encountering a tumor of softened œdomatous fibrous tissue, diagnosticated by Dr. H. C. Coe, pathologist to the Woman's Hospital, as a soft *fibroid tumor of the pelvic connective-tissue*, which was removed. The patient did well, and now, five weeks after the operation, there is no sign of returning hernia.

With reference to these varieties of hernia little could be said concerning treatment, as we were poor in methods of affording decided relief, and had no means of cure. Should he meet with other cases, however, Dr. Thomas would be inclined, if they were of sufficient gravity, to perform laparotomy and drag the sac up, as was done in the case reported.

Dr. Castle, from the Committee on Revision of the Constitution and By-laws, read the report, after which the Academy adjourned.

The Mortality from Hydrophobia.—In England and Wales during the years 1870 to 1883, has averaged from 31 to 82 in a population of about 20,000,000. The total number of deaths in thirteen years, was 635.

Correspondence.

SOME CURIOUS FACTS CONCERNING "THE JUMPERS."

To the Editor of The Medical Record.

Sir: During a somewhat protracted term of service as United States Sanitary Inspector on the northern frontier of Maine, between Canada and the United States, I have been much interested as well as amused in watching a certain class of individuals found among the hordes of French-Canadians who pass annually from all parts of Canada into the States, particularly into Maine and other lumbering districts. These people to whom I refer go by the name of "jumpers."

They attracted my attention as presenting some points of interest bearing upon the nervous system, showing to what a hyper-sensitive condition it may be brought by certain influences early begun and long continued.

I had from time to time heard lumbermen and others whose avocations lead them to spend much time among the French camps speak of these "jumpers," but had given no credence to the, as I thought, absurd stories they related in regard to them, until one day, while attending to my duties in the waiting-room of my fumigating station, I incidentally let fall the window near my desk, by turning the button suddenly, thus letting the frame fall a short distance, making a quick, sharp noise, when three out of seven French-Canadians who were sitting near, awaiting their certificates of inspection, leaped into the air as if they had been shot, at the same time uttering a yell which would have done credit to a North American Indian. From that time I was on the watch for these strange characters, and, when possible, made inquiries of them through my interpreter in regard to the cause of their condition. Before speaking of this, perhaps it will be well to enumerate some of the manifestations which give them the characteristic name of "jumpers." One or two instances will be sufficient. Recently one of them, a French-Canadian of small stature, came out from an adjacent camp to the post-office. Just as he was about to ask the postmaster for his mail, he being a total stranger to the official, a man of sixty-five years of age, some one knowing the fellow to be a "jumper," mischievously cried out: "Grab him by the throat!" The fellow sprung like a cat and grasped the old man by the throat, and held on until removed, the irate postmaster pouring forth torrents of invectives on the poor fellow, who really was perfectly guiltless.

Another unfortunate wood-chopper had just come into camp from two days' work, and was standing near the large camp-heater, in which was a very hot fire, when some one cried: "Grab the furnace!" No sooner were the words said than the poor fellow obeyed the order, and as a result left a scorched pattern of each hand on the nearly red-hot pipe, thus rendering him unfit for his work in the woods for some weeks.

I could, were it not for taking up valuable space, enumerate instance after instance fully as peculiar as the above. In brief, it may be stated that at any time and under any circumstances, with the slightest provocation, and almost instantaneously on being spoken to, one of these fellows will obey any command, imitate any action, without regard to its nature, trivial or serious. He will leap on to a table, or over a stove, or into a river or pond; throw any article or weapon he may have in hand in any direction indicated; will repeat any sentence or exclamation.

So serious a matter is this that many of the lumbermen absolutely refuse to admit a man known as a "jumper" into their camps.

I find they are not wholly confined to French-Canadians, as occasionally a Canadian of Irish parentage will exhibit the same symptoms.

As stated above, I have endeavored, when possible, to investigate as to the cause of this peculiar and distressing condition; and while I find, without doubt, that primarily it is due to an inherited nervousness, the immediate cause is in taking such children, when small, and while firmly held tickling them until convulsive symptoms appear. This seems to be the story of such ones as I have made inquiries of. Whatever the cause, the condition is one much more easily acquired than lost, as it firmly clings to its victim far into adult life.

J. B. THORNTON, JR., M.D.,
Sanitary Inspector U. S. Marine Hospital Service.

MOOSE RIVER, SOMERSET COUNTY, MAINE,
November 30, 1885.

BROTHERLY LOVE IN MEDICINE AND A MEDICAL ARCADIA.

TO THE EDITOR OF THE MEDICAL RECORD.

SIR: In these days of complaints about the abuse of medical charities, resignations from the International Medical Congress, Code discussions, and heart-burnings consequent upon the overcrowding of our professional ranks, it may be profitable to some to glance at what we here, in our innocence, consider to be the "Banner Medical County" of the United States. I refer to Boulder County, Col.

Our county contains less than 12,000 inhabitants, the largest town in it having 300. To attend to the medical wants of the county we have twenty-one legal practitioners (that is, legal either by diploma or license of the State Board of Medical Examiners), some four or five medical guerillas, several midwives, and a few retired medical gentlemen. These all manage to live in a comfortable manner, but for fear that others may wish to rush in and divide our blessing, I will state that we also have a Medical College in full blast, mostly run by outside physicians, so are able to fill all vacancies that may occur in our ranks.

Judging from this condition of affairs, you might infer that we have a "pretty kettle of fish to fry." Nothing of the kind. We have a regular Medical Society, which meets twice a year; there we discuss practical questions, or, if a member chooses, he reads a paper, being careful not to bore the rest with extracts or a rehash of what each man has in his library, and with which he is presumed to be fully acquainted. When disposed, we lighten the heavy work by sly jokes at each other's expense.

As to the subject of medical charity, we all have a number of charity patients, among them are dead beats whom we cannot eliminate; these occupy as much of our time as the average city practitioner gives to his hospital work. But should one of our number manifest a disposition to monopolize more than his share of this kind of work, we don't hold indignation meetings; not much; on the contrary, we all go out of our way to send him dead beats and charity cases until he is satisfied.

Under the operations of an unwritten by-law no Code discussions are permitted. Each member consults with whom he pleases, and is never required to justify himself by special pleading of "an emergency," or "for diagnostic purposes only."

Again, if a member fancies that he has a grievance against a brother, he is, by the operation of another unwritten by-law, forbidden to make a battle-ground of the Society meeting; our purpose of meeting is to have a good time socially as well as professionally, and we succeed.

PERFECT BLISS, M.D.

DYSIDROSIS OF THE FEET.—Mr. W. Whitworth advises that two pieces of common adhesive plaster be cut, of the same shape as the flat of the feet, and applied to the soles. Sweating and malodor will speedily cease.—*British Medical Journal.*

Reviews and Notices.

MINOR SURGICAL GYNECOLOGY. A Treatise of Uterine Diagnosis and the Lesser Technicalities of Gynecological Practice, including General Rules for Gynecological Operations and the Operations for Lacerated Cervix and Perineum, and Prolapse of Uterus and Vagina, for the Use of the Advanced Student and General Practitioner. By PAUL F. MUNDÉ, M.D., Professor of Gynecology at the New York Polyclinic and at Dartmouth College; Gynecologist to Mount Sinai Hospital, etc. Second edition, revised and enlarged, with three hundred and twenty-one illustrations. 8vo, pp. 552. New York: William Wood & Co. 1885.

THE second edition of this excellent work is before us, presenting many additions to the first edition, including rules for the governing of gynecological operations in general, and a minute description of the operations for laceration of the cervix and perineum, and prolapsus of the uterus and vagina. As the book is principally intended for beginners, the various methods of examination and diagnosis are very thoroughly studied. This part of the work will prove of great aid to the student, as success in gynecology results from a close attention to details, which is sometimes overlooked by the general practitioner. It is said that the last achievement of a science is to define itself; this may explain the difficulty of gynecologists in agreeing upon the exact position of the uterus. Concerning this vexed question the author explains that with every variation in intra-abdominal pressure during inspiration and expiration, and voluntary motions and positions of the body, the fundus and body of the uterus vibrate back and forth, like a pendulum, with its pivot at the reflection of the vagina on the cervix. A diagram is given showing the degrees of normal mobility of the uterus, with its average normal position. The student is thus enabled to begin the study of displacements with some degree of intelligence. The usual rather formidable array of pessaries is given, with plates; but a set of rules governing their introduction and supervision may lessen to a certain degree the perplexity of this subject to the beginner. It is not necessary to notice other points of value in this work. For those starting out upon the study of gynecology, and even for students more advanced in knowledge of the science, the book will prove invaluable. Good illustrations and a clear type enhance the value of the work.

THE MEDICAL NEWS VISITING LIST FOR 1886. Philadelphia: Lea Brothers & Co. 1885.

"IF the office of a visiting list is," to quote from the Preface, "to enable a physician to keep a clear record of his engagements and of his professional work," this list of the *Medical News* is certainly a model in its way. In addition to spaces for records of visits made, it has the usual tables of poisons, doses, etc., together with pages for addresses of patients, nurses, and all others whose whereabouts might be of interest to the physician. A thumb-letter index facilitates the work of reference. The volume is compact and complete, and a credit to the printer's and binder's art.

MICROSCOPICAL TECHNOLOGY, FOR USE IN THE INVESTIGATIONS OF MEDICINE AND PATHOLOGICAL ANATOMY. By DR. CARL FRIEDLÄNDER. Translated by STEPHEN YATES HOWELL, M.A., M.D., Buffalo, N. Y. New York and London: G. P. Putnam's Sons. 1885.

As the matter now stands, this volume is in competition with one published by another firm, and from another translation. The intrinsic merit of the two translations is practically equal. This book differs from the other in that it contains additional matter furnished by the translator, and also that it has no index. The material added by Dr. Howell is very acceptable, and enhances the value of the book. The merit of Friedländer's writing goes

without question, and does not require special reference, other than to say that it is concise, comprehensive, and scientific.

The house, however, that will publish such a work, or any work which is likely to be used as a book of reference, without giving it a complete index, ought to close business. Such an omission is inexcusable, and will provoke members of the medical profession unduly to the use of "swear words."

The excellence of the text is too great, and the translation is too excellent to be subjected to such a mutilation.

Medical Items.

CONTAGIOUS DISEASES—WEEKLY STATEMENT.—Report of cases and deaths from contagious diseases reported to the Sanitary Bureau, Health Department, for the week ending December 19, 1885:

Week Ending	Typhus Fever.	Typhoid Fever.	Scarlet Fever.	Cerebro-spinal Meningitis.	Measles.	Diphtheria.	Small-pox.	Yellow Fever.
Cases.								
December 19, 1885	5	15	56	2	12	78	12	0
Deaths.								
December 19, 1885	0	4	16	2	0	32	1	0

THE ITALIAN MEDICAL CONGRESS.—The Eleventh General Congress of Italian physicians, held in connection with the meetings of several hitherto independent medical societies, was convened in Perugia during the third week of September, 1885. Over three hundred of the representative medical men of Italy were present. At the opening session addresses were made by Professors Madruzza, Toscani, and Corradi, and by the Mayor and Prefect of Perugia. At the other general sessions addresses were made by Dr. Zucchi, who urged that the direction of matters of sanitation and public hygiene be confided to the medical profession; by Professor Pagliani, who advocated the passage of a bill regulating the hours of labor and the nature of the employment of women and children; and by Professor Pacchiotti on "Quarantine," in which the speaker argued against the establishment of land quarantine and sanitary cordons, and the fumigation of travellers and of mail matter. In the Section on Practice of Medicine, Dr. Paoletti read a paper on "Cholera," in which he endeavored to explain all the symptoms of the disease by the occurrence of spasm of the non-striated muscular tissues (arterial and intestinal), and stated his belief that the affection was a neurosis allied to tetanus. This view was strongly opposed by Professor Levi and others. Professor M. R. Levi related two cases of "Diphtheritic Nephritis," in which the morbific principle was located primarily in the epithelium of the glomeruli and tubules of the kidney. He regarded these cases as analogous to primary scarlatinal nephritis, and contended that they were an evidence that diphtheria was a general disease with local manifestations. This opinion was sustained by the majority of the speakers taking part in the discussion. Dr. A. Bianchi read a paper on "Auscultatory Percussion," exhibiting the instruments employed by him and demonstrating the application of the method on the living subject. Dr. Olivieri presented a communication upon the "Abortive Treatment of Typhoid Fever by Means of Intestinal Irrigations with Carbolized Water." He was opposed by Professor Levi, who pointed out the danger of poisoning from carbolic acid, and said that he had little faith in the efficacy of this drug, given either by the mouth or by the rectum, as a specific in typhoid fever. Professor M. R. Levi followed with a paper on the "Treatment of Diphtheria," in which he spoke very strongly in favor of oil of turpentine, given internally and by inhalation. As adjuvants he employed cold applications, lime-water, and lactic acid. Quinine and tonics were given internally when indicated. He advocated tracheotomy whenever death from suffocation was threatened. Professor Maragliano read a paper on "Antipyresis and Antipyretics," in which he expressed a decided preference for thallin over antipyrin, asserting that its action was more rapid and that it was effective in smaller doses. But he preferred baths and the application of cold externally to any of the internal antipyretics. In the ensuing discussion considerable stress was laid upon the danger resulting from the action of the antifebrile drugs in preventing the elimination of urea and carbonic acid, and a general preference was expressed for external antipyretic methods. Professor Riva spoke upon the "Treatment of Tuberculosis by Intrapulmonary Injections." He had found the lung-tissue very tolerant of these injections, but did not think the treatment exerted any curative influence upon the disease, although it had some effect upon the course of the fever. Dr. Magliero spoke of the efficiency of "Lemon-juice in the Treatment of Malarial Diseases," and Dr. Moretti related a case of a contagious "Dermatosis of the Lower Lip" somewhat resembling eczema. Dr. Nosotti said the eruption was very like that of epizoötic aphthæ, and he thought that probably the disease in question had been communicated from an animal. Dr. Balestrieri related several cases of "Tetanus" cured by the use of tartar emetic. Dr. Ascenzi exhibited an apparatus for the inhalation of compressed or rarefied air or of medicated vapors. Dr. Pagliani presented a short communication upon the "Treatment of Sciatica," in which he spoke of the good effects of strong sinapisms and baths of dry hot air. Dr. Dal Fabbro related a case of "Traumatic Cerebral Affection," in which the symptoms were corroborative of the present theories of motor localization in the cortical centres. Dr. Queirola read a paper on the "Physical Examination of the Spleen," demonstrating the changes in the area of splenic dulness occasioned by the different postures assumed by the patient. Dr. Bianchi spoke of the uses of the "Juice of the Fig," and explained the method of its preparation. He said that it possessed the power of digesting fibrin and albumin, and might be used with benefit in dyspepsia from deficient secretion of the gastric juice. In the Section on Surgery Professor Ceccherelli read a paper on "Tubercular Osteitis and Arthritis," which gave occasion to a somewhat animated discussion. Professor Durante presented a patient from whom he had removed a tumor of the dura mater, situated at the base of the skull on the left side. Entrance to the cranial cavity was obtained through an opening made in the left parietal bone. Professor Laurenzi sent a report of various operations performed by him, comprising laparotomy, resection of the knee, ligature of the carotid artery, and an operation for empyema. Professor Ceci related an operation for the "Extraction of Calculi from the Left Ureter," and Professor Massei reported several cases of "Erysipelas of the Larynx." Professor Occhini sent a communication entitled "Properitoneal Hernia," and Professor Chiari read a paper on "Hysterotomy for the Removal of Multiple Fibromyomata of the Uterine Appendages." Many of the papers presented elicited prolonged discussion. In the Section on Obstetrics and Gynecology papers were read by Professor Chiari on "Puerperal Antisepsis as Practised in the Obstetrical Institute at Florence," and upon a case of "Continuation of Pregnancy after Puncture of the Amniotic Sack and Evacuation of the Fluid." Dr. Borsini related a case of "Partial Ovariotomy." The patient was seventy-six years of age, and the operation was successful in its results. Dr. Piccinini read a paper on the "Treatment of Myomata of the Uterus." He employed the continued current, and

gave ergotine internally. Dr. Fibbi reported a case of "Cæsarean Section." The operation was rendered necessary by dystocia due to a fibroma of the uterus. Professor Fabbri read a paper on "Dropsy of the Amnion," relating three cases of the disease, and discussed the origin of the amniotic fluid. Dr. Mori presented a communication on "Uræmia as a Complication of Pregnancy," and advocated hypodermic injections of citrate of iron in the treatment of this affection. There were other Sections on Hygiene, Anatomy, and Physiology; Syphilis and Diseases of the Skin; Pharmacy and Psychiatrics, and Legal Medicine. In the general conferences papers were read by Professor Pagliani, on the "Best Systems of Sewerage in Cities;" by Dr. De Medici, on "Cremation;" by Dr. Simoncini, on "Evolution in the Education of Man;" and by Dr. Nomi, on a "Method for the Preservation of Cadavers." At the closing session it was resolved to form a permanent union of the various independent societies which had taken part in the congress. Pavia was selected for the next meeting, to be held in 1887.—*Lo Sperimentale*, No. 10, 1885.

To Increase the Efficiency of the Paquelin Cautery.—Dr. M. S. Kakeles, of New York writes: "The use of the Paquelin apparatus for cauterizing purposes cannot be overestimated, and in many cases is far superseding the expensive Galvano-cautery. To increase its efficiency the air-chamber of the now almost universally used spray apparatus is utilized instead of the ordinary rubber hand and air bulb. Its simplicity and convenience for office work is so far superior as to be immediately apparent to all who will give it a trial. It has been used in several cases in Dr. Alex. Hadden's office in operations for the removal of nævi, and with such good results as to call forth admiration of its applicability, and at the same time the condemnation of the tiresome hand apparatus. By merely connecting the benzine receptacle with the rubber tube from the air-chamber, we have a reservoir of compressed air at the immediate control of the operator. He can easily increase or diminish the quantity of air by a valve attached to the tube, and thus regulate the intensity of heat in the platinum point. So convenient is it, and its manipulation so easy, that after once it is used it will always be preferred to the wearisome hand bulb. Its practicability consists in that: 1. We have a reservoir of air of sufficient amount for quite a lengthy operation, confined at any pressure and under the control of the operator himself, which obviates the necessity of an assistant to work the hand bulb in order to keep up a constant glow. 2. We can regulate the pressure by the stop-cock attached to the tube, and thus keep up an equal temperature in the platinum point, or increase or diminish it. 3. A single person is only necessary to use the apparatus, by merely regulating the intensity of the heat by turning on the valve to a certain degree and allowing the air to blow through the Paquelin. Certainly, in operations at private houses, it would not be very convenient to carry a large air receiver along with the Paquelin instrument, but for office, hospital, and dispensary use there is no readier or more convenient apparatus for cauterizing purposes.

Ideal Cholecystotomy.—Dr. A. C. Bernays, of St. Louis, Mo., writes: "In your notice of my paper on 'Ideal Cholecystotomy,' you say that I report a case of cholecystotomy 'upon which he bestows the epithet "ideal," for various reasons sufficient unto himself.' I desire to correct this misunderstanding, and to make the following short explanation: Sims' method of cholecystotomy necessitates the formation of an abdominal biliary fistula. It exactly copies after nature in her efforts to effect a spontaneous cure of cholelithiasis. I called *this method* 'natural' cholecystotomy. The method employed by me does away with the abdominal fistula, and causes an immediate *restitutio ad integrum*. I called this method '*ideal*' cholecystotomy. It perfectly fulfils all that we can ask of the surgical art, in contradistinction to the method which imitates the healing process of nature but leaves the parts in an abnormal condition even after the fistula has become closed. Since the publication of my paper I have received accurate descriptions of the only two cases where a similar operation was supposed to have been performed successfully before. It so happens that my case is the only successful one up to date, the case by Courvoisier ended fatally some weeks after the operation, and the Bebbs case was not a cholecystotomy at all, but seems to have been a removal by abdominal incision of some gall-stones, which had perforated the gall-bladder and had become encysted after adhesions had been formed by a circumscript peritonitis. Finally, I may be allowed to express my pleasure at having placed American surgery one step in the van in a new field of our art."

Toxic Action of Cocaine.—Dr. Ziem, of Dantzic, has communicated to the *Allgemeine Medicinische Central-Zeitung* the notes of a case in which he applied two drops of a four per cent. solution of cocaine to the eye of a man aged forty. In a few minutes after the pupils had become dilated, the patient's face became pale, sweat broke out on his forehead, and his breathing became embarrassed. Dr. Ziem at once loosened his clothes and opened the window, but it was a quarter of an hour before he could return home. The man's wife said that he had not previously had syncope. He was of intemperate habits, and some years ago had been treated for disturbances of motor power in the lower limbs, apparently connected with syphilis. Dr. Ziem says that seventeen cases have been recorded in ophthalmological literature in which toxic effects followed the use of cocaine. In three it was injected hypodermically, and in fourteen dropped into the conjunctival sac. The cases have been described by Peck (1), Mayerhausen (1), Stevens (1), Reich (2), Knapp (3), Heuse (4), and Bellarminoff (5). In some cases the symptoms have been transient, consisting of pallor of the face, giddiness, and sweating of the face or neck; in others there have been dyspnœa, great feeling of prostration, malaise, and apathy, lasting sometimes for several days. Vomiting and headache have been rarely present. In one case the application of fifteen drops of a two per cent. solution to the conjunctiva was followed by tottering gait, difficulty of speech, confusion of the mind, and extraordinary restlessness; and in another the subconjunctival injection of about eight drops of a 3.5 per cent. solution produced convulsions and loss of consciousness. The strength of the solution used was four per cent. in eight cases, 2.5 per cent. in four, and two per cent. in three or four others. The quantity generally varied from two to four drops. The subjects were in some cases feeble, aged women; in others they were strong and healthy individuals, both male and female.—*British Medical Journal.*

Reduction of Temperature by Ice-bags.—Dr. F. A. Burrall, of this city, writes to the *Journal of the American Medical Association*: "Stephan, of St. Petersburg (see *Journal*, September 26, 1885), is of opinion that the temperature in fever may be lowered by the application of ice-bags over the superclavicular region. This effect is produced by bringing the cold in contact with the large superficial veins of the neck. I have noticed that in some cases of pneumonia a sensation of intense heat is one of the most trying sensations from which the patient suffers. In two of my cases much relief was afforded by the continuous application of the ice-bag to the occipito-cervical region. One of the patients told me 'it was the only comfort he had.'"

What Becomes of the Medical Students.—Our English exchanges inform us that Sir James Paget has been studying the question of what becomes of the medical students. Some statistics are given which are hardly to the purpose. Evidently Sir James has never watched the medical students slip round the corner at the close of lecture.

Progress of Medical Science.

THE NON-TUBERCULOUS NATURE OF LUPUS.—The following are the conclusions of Dr. Gamberini, in an article on this subject appearing in the *Giornale Italiano delle Malattie Veneree e della Pelle*, Nos. 3 and 4, 1885: 1, Lupus is not identical with tuberculosis; 2, even if tubercle is found in the tissue attacked by lupus, it does not necessarily follow that tuberculosis is the cause of the degeneration, for bacilli have been only occasionally found here, while they are abundant in tuberculous tissues; 3, experiments upon rats do not bear out the theory of identity of causation of the two diseases; 4, the differences exhibited in the response of the tuberculous and the lupus ulcerations to therapeutic measures is very striking; 5, lupus and the tuberculous skin affections are very dissimilar in their symptomatology and cause.

A NEW DISEASE.—Dr. Lutz has observed in the province of San Pablo, Brazil, several cases of a peculiar disease, of which he has never seen a description. It begins with vomiting and diarrhœa, hoarseness and a cough, and frequently coryza and catarrhal conjunctivitis. Then appears œdema of the skin, accompanied sometimes by ascites and a peculiar dermatitis, under the form of an erythema; invading first the lower parts, and then spreading over the whole body in patches of variable extent. This erythema does not disappear under pressure of the finger, and becomes gradually of a dark purple color, and finally black. Desquamation takes place in large strips, leaving a tender epidermis, which, in the negro, is without color. There is fever at the commencement of the disease, and grave anæmia occurs as a sequela. The duration is several months. It begins generally with symptoms of gastro-enteritis, or of bronchitis, and œdema and ascites appear only after several weeks. Of 23 cases seen by Dr. Lutz, 10 died, 6 recovered, and the result in the others was unknown. The disease affects chiefly infants who have been weaned, and is probably due to some special food. The author states that it bears considerable resemblance to pellagra.—*La Independencia Médica*, November 11, 1885.

CANCER OF THE LIVER AND PANCREAS IN AN INFANT.—Dr. Bohn reports the following case: "The child was born of healthy parents, and presented nothing abnormal during the first half-year of life. At the beginning of the seventh month the mother accidentally discovered a spot of induration, about the size of an apple, in the abdomen, which increased with great rapidity, so that within three or four weeks the tumor filled the greater part of the abdominal cavity. When the tumor was first discovered the health of the child seemed to be unaffected, but emaciation soon commenced, and during the few days immediately preceding death there was intense icterus, and the limbs and abdomen were covered with petechiæ. The child died within two months after the discovery of the tumor. The autopsy revealed primary cancer of the pancreas, with secondary infection of the liver and retro-peritoneal lymphatics. The pancreas was almost entirely destroyed, the head only exhibiting some remains of glandular tissue. About the portal vein was a collection of enlarged glands, and on the surface of the liver, as well as within its substance, were numerous white, hard nodules, varying in size from that of a pea to that of a plum. Examination showed the new formation to be a typical carcinoma simplex.—*Wiener Medizinische Wochenschrift*, November 7, 1885.

PEMPHIGUS NEONATORUM.—Dr. Plomberg reports the case of a girl, six days old, who presented numerous little blisters, from the size of a hemp-seed to that of a hazel-nut, upon the genitals and neighboring portions of the thighs. Gradually the eruption spread over the entire body, being very thick over the four extremities, the face, and the scalp, and somewhat more thinly scattered over the trunk and neck. The entire sole of the right foot, with the toes, was involved in one large bulla, and after this had broken the epidermis came away like a glove. Two smaller blebs were present on the sole of the left foot, but the palms of the hands were free. The blisters rapidly attained their full development, and burst after two or three days, giving exit to a yellow serum. They were surrounded with a pale reddish areola, and after breaking left the denuded corium red and moist. The excoriations healed rapidly, crusts forming only on the face.—*Wiener Medizinische Wochenschrift*, November 7, 1885.

TREATMENT OF FAVUS IN THE ADULT.—The crusts should first be removed by lotions of green soap, preceded, if necessary, by poultices. The hair is then to be cut as short as possible, and an ointment of 8 to 15 grains of bichromate of potassium in one ounce of lard applied, the head being afterward covered with a cap of linen or cotton cloth. The head should be thus washed with green soap, and covered with the ointment every morning and evening. If the application cause much smarting the proportion of potassium bichromate should be reduced, or if the crusts fail to become detached it should be increased. A trial of a few days' duration will suffice to determine the relation between the individual tolerance and the degree of activity of the ointment. The hair should be cut very close, but epilation is useless.—*Journal de Médecine de Paris*, November 15, 1885.

HÆMATEMESIS FOLLOWING A SUPERFICIAL BURN.—Professor Demme reports the case of a strong, healthy boy, five years old, who received a superficial burn of the left forearm and hand. The epidermis was raised in blisters on the wrist and extensor surface of the forearm, but there was no destruction of the deeper cutaneous tissues. A liniment of linseed-oil and lime-water was applied. Six hours after the receipt of the injury the patient vomited some milk which he had taken an hour before. An hour and a half later he vomited suddenly a quantity of mucus strongly colored with blood, and the hæmatemesis recurred frequently during several hours, the loss of blood being so great as to threaten the life of the child. Eighteen hours after the burn was received another attack of vomiting occurred, and the patient went into collapse. The temperature fell within two hours from 101° to 94° F., and the pulse became so rapid that it could not be counted. The face and extremities were cool, and covered with a clammy sweat, and the pupils were dilated. The feet and legs were covered with mustard plasters, and ether was injected hypodermically every half hour. The patient gradually recovered his strength. During the succeeding days there were several copious stools of altered blood.—*Wiener Medizinische Wochenschrift*, November 7, 1885.

RECOVERY FROM TRAUMATIC TETANUS.—Dr. Rangé reports the case of a man whose foot was amputated on May 3d on account of osteitis. The case progressed favorably, and cicatrization was nearly complete on the 18th of May, when he complained of inability to open the mouth. There was no elevation of temperature, and the wound looked well; but the patient was not very docile and persisted in flexing the leg, thus rubbing the soft cicatrix at the end of the stump against the bed-clothing. The rigidity of the muscles of mastication and of the neck persisted, with some remissions, for a week, when general tetanic spasms set in. An attempt was made to give morphine hydrochlorate hypodermically, but the act of inserting the needle excited fresh convulsions, so the solution was used endemically, being applied to the stump. The trismus having subsided, chloral and bromide of potassium were given internally. It was impossible to isolate the patient, but in spite of this inconvenience improvement began in a few days, and by the end of the month recovery was complete.

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